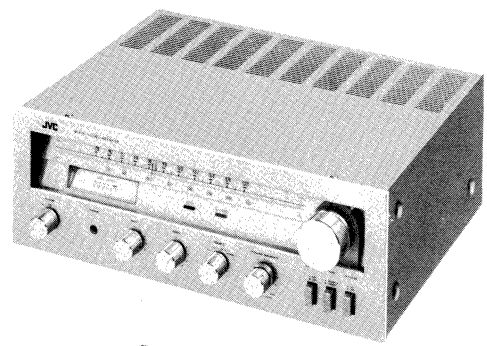
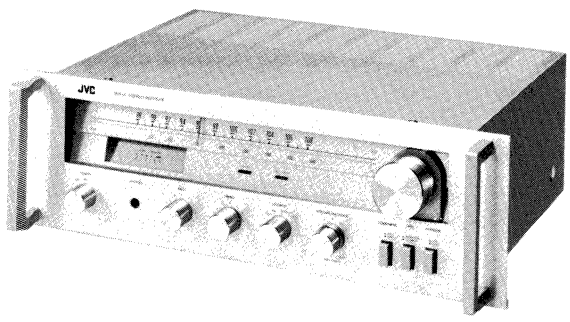
JVC

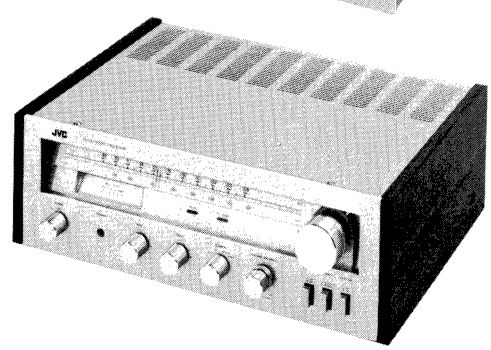
SERVICE MANUAL

MODEL
JR-S61M/S61W/ S61H

STEREO RECEIVER







No. 2432
DEC.1977

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Note:
When replacing the parts marked with ⚠ , be sure to use the designated parts to ensure safety.

1. Specifications

		JR-S61M	JR-S61W	JR-S61H
Dimensions (cm)	H :	15.1 (6")	15.1 (6")	15.1 (6")
	W	42.0 (16-9/16")	44.4 (17-1/2")	48.0 (18-15/16")
	D	34.3 (13-9/16")	34.3 (13-9/16")	35.4 (13-15/16")
Weight (Net)	:	6.8 kg (15.0 lbs.)	7.8 kg (17.2 lbs.)	7.0 kg (15.5 lbs.)

Amplifier Section

RMS Power (Both channels driven)	:	18 watts per channel, min. RMS at 8 ohms from 20 Hz to 20 kHz with no more than 0.8 % total harmonic distortion.
RMS Power (Both channels driven at 1 kHz)	:	20 watts per channelat 8 ohms 24 watts per channel at 4 ohms
Total Harmonic Distortion	:	0.8 % rated output power 0.1 % at 50 % rated output power at 1 kHz
Damping Factor	:	40 at 8 ohms
Input Sensitivity, Impedance and Signal to Noise Ratio	:	Phone: 2.5 mV/50 kΩ & 75 dB Tape Mon: 180 mV/50 kΩ & 90 dB
Recording Output Level	:	150 mV (Pin)
Frequency Response	:	20 Hz to 40 kHz ± 1 dB
Loudness Control Range (Volume Control at −30 dB position)	:	20 Hz to 40 kHz , ±6 dB at 10 kHz
Tone Control	:	Bass: ± 10 dB at 50 Hz Treble: ± 10 dB at 10 kHz

FM Tuner Section

Usable Sensitivity	:	12.1 dBf (1.8 μV)
Total Harmonic Distortion at 1 kHz and 100 % Modulation	:	0.2 % (Mono), 0.4 % (Stereo)
Signal to Noise Ratio	:	IHF Weighted
Selectivity	:	70 dB IHF Alternated
Capture Ratio	:	1.5 dB
Image Rejection	:	55 dB
IF Rejection	:	80 dB
Stereo Separation	:	30 dB at 50 Hz to 10 kHz 40 dB at 1 kHz

AM Tuner Section

Usable Sensitivity	:	MW 30 μV, 300 μV/m at 1 000 kHz
Image Rejection	:	MW 45 dB
Selectivity	:	MW 30 dB
IF Rejection	:	MW 40 dB
Signal to Noise Ratio	:	MW 50 dB

Power Supply Section

Designated Areas	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120 V, 60 Hz	100 watts
CANADA	AC 120 V, 60 Hz	100 watts
UK & AUSTRALIA	AC 240 V∿, 50 Hz	220 watts
EUROPEAN CONTINENT	AC 220 V∿, 50 Hz	220 watts
OTHER AREAS	AC 100/120/220/240 V∿ Selectable, 50/60 Hz	220 watts

Design and specifications subject to change without notice.

2. Removal Procedures

2-(1) Top Cover and Bottom Plate

Procedure and Part Numbers:

1. Remove 6 screws (Item No. 4) through the both sides of the cover and one screw (Item No. 2) from the back of top cover.
2. Remove the top cover. (Item No. 1)
3. Remove 4 screws (Item No. 8) from bottom plate (Item No. 7) and remove the bottom plate from the chassis.

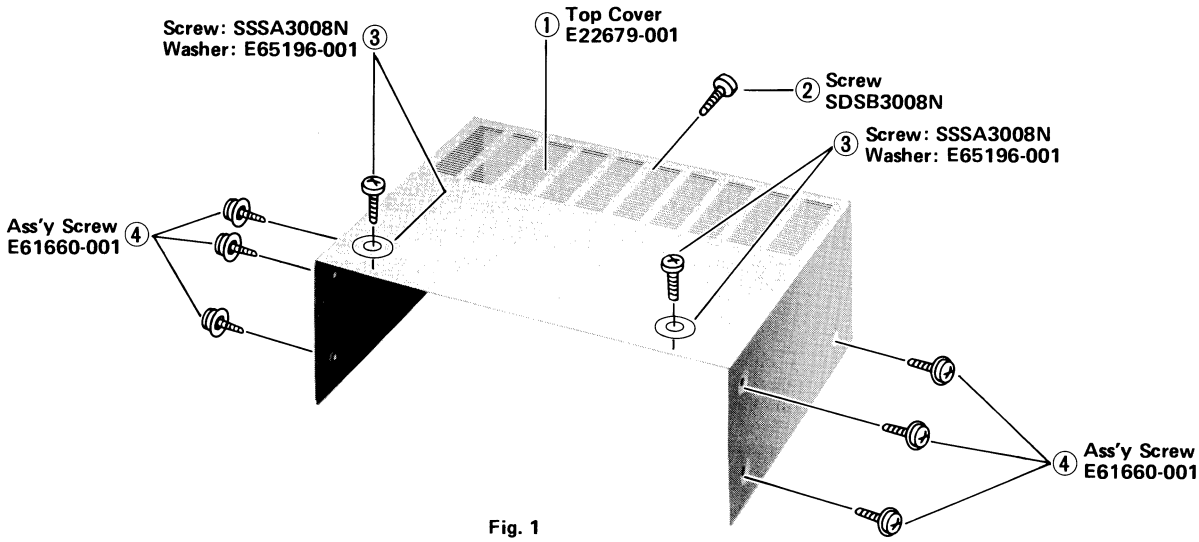


Fig. 1

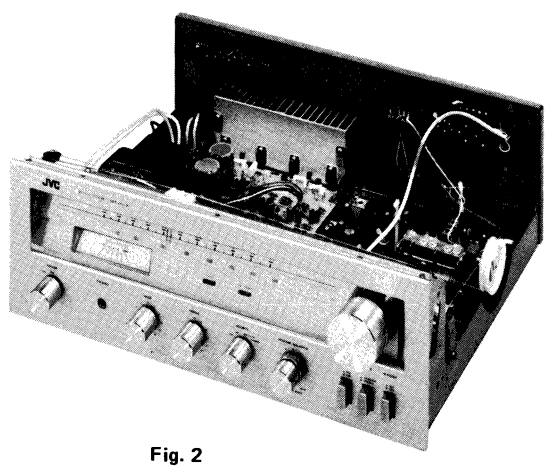


Fig. 2

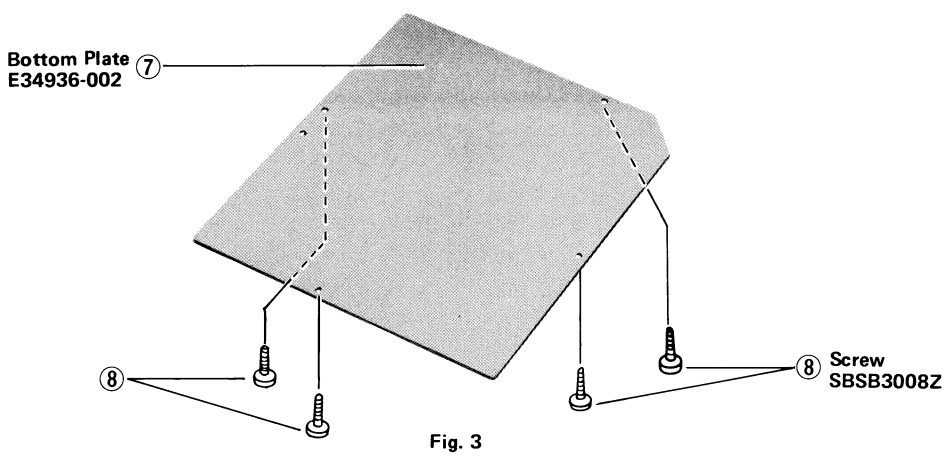


Fig. 3

2-(2) Front Panel

Procedures:

1. Remove the top cover. Refer to the removal of top cover on the left page.
2. Pull out the knobs item no. 1 through no. 6 carefully. Refer to Fig. 4.
3. Remove three screws item no. 8 located on the bottom of the front panel. See Fig. 5.
4. Remove two screws item no. 9 located on the top of the front panel. See Fig. 6A.
5. Pull out the front panel carefully.

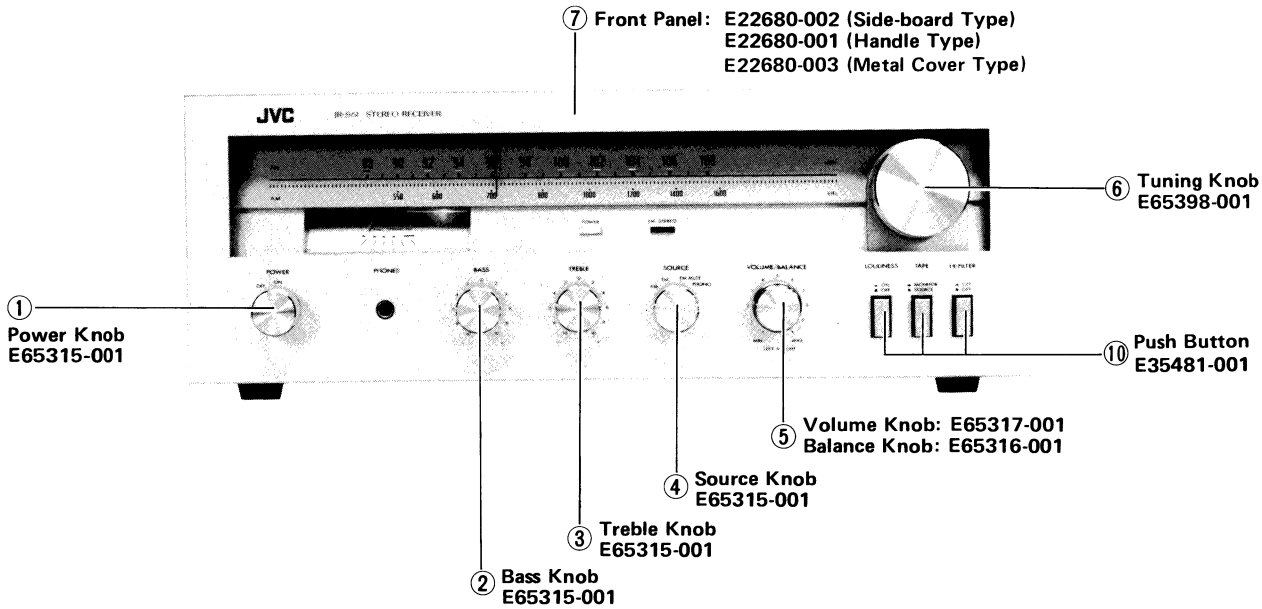


Fig. 4

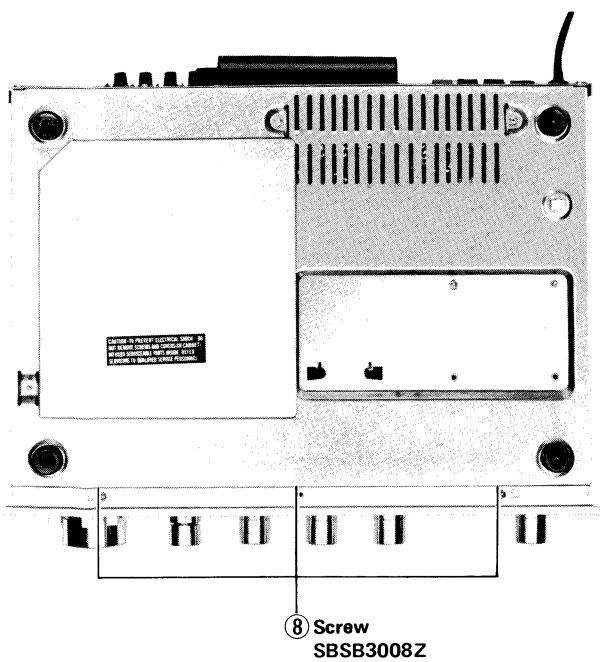


Fig. 5

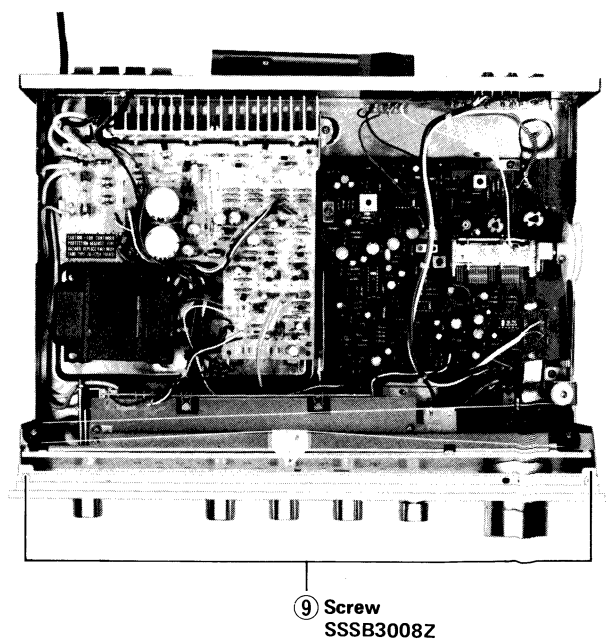


Fig. 6A

2-(3) TXX-131 Main Amp. and Power Supply P.C. Board Ass'y

Procedures:

1. Remove one tapping screw (Item No. 1) from the bottom of chassis. Refer to Fig. 6B
2. Remove two tapping screws (Item No. 2) located on the heat sink.
3. Remove a fastner (Item No.3) located on the circuit board and remove a wire clamp on the heat sink (Item No. 4). Refer to Fig. 7.
4. Remove TXX-131 carefully placed on the heat sink as shown in Fig. 8.

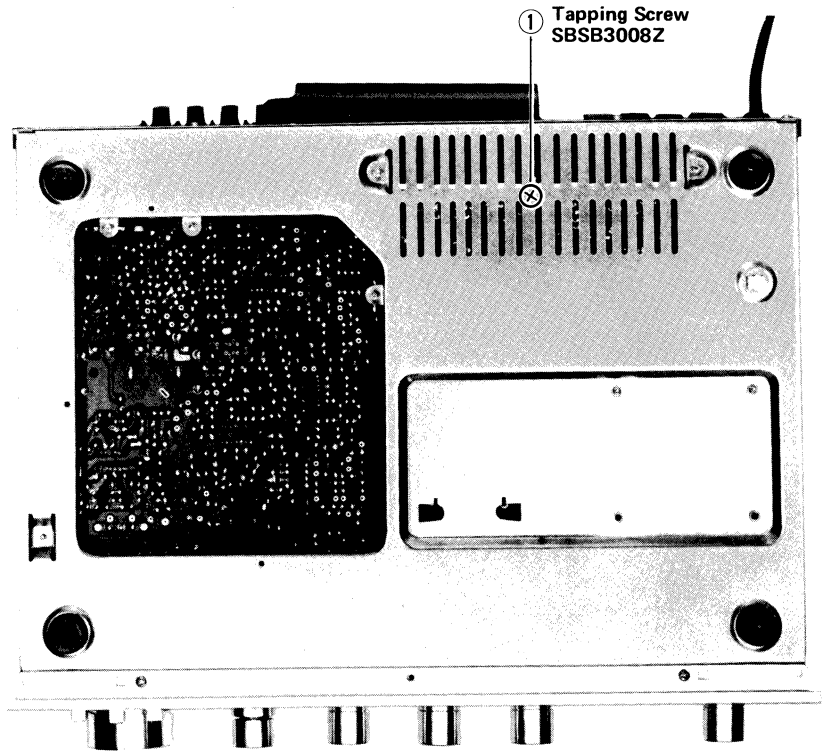


Fig. 6B

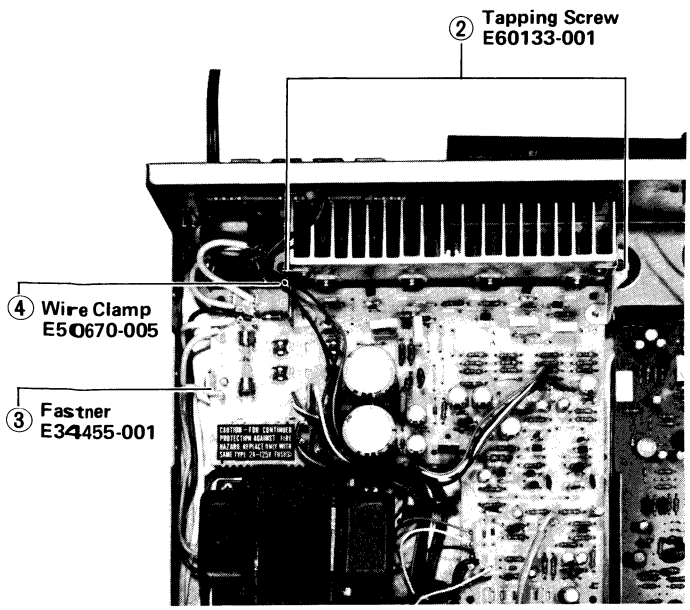


Fig. 7

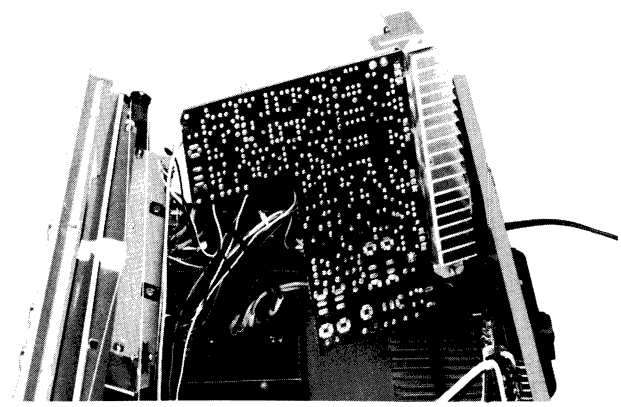


Fig. 8

3. Main Parts Location and Part Numbers

3-(1) Top View

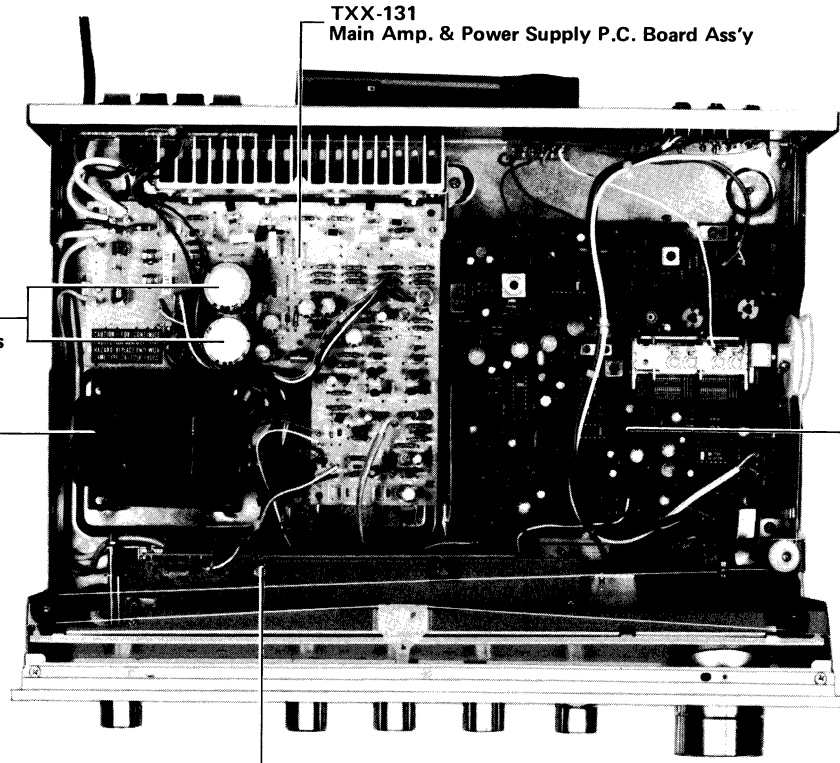


Fig. 9

3-(2) Bottom View

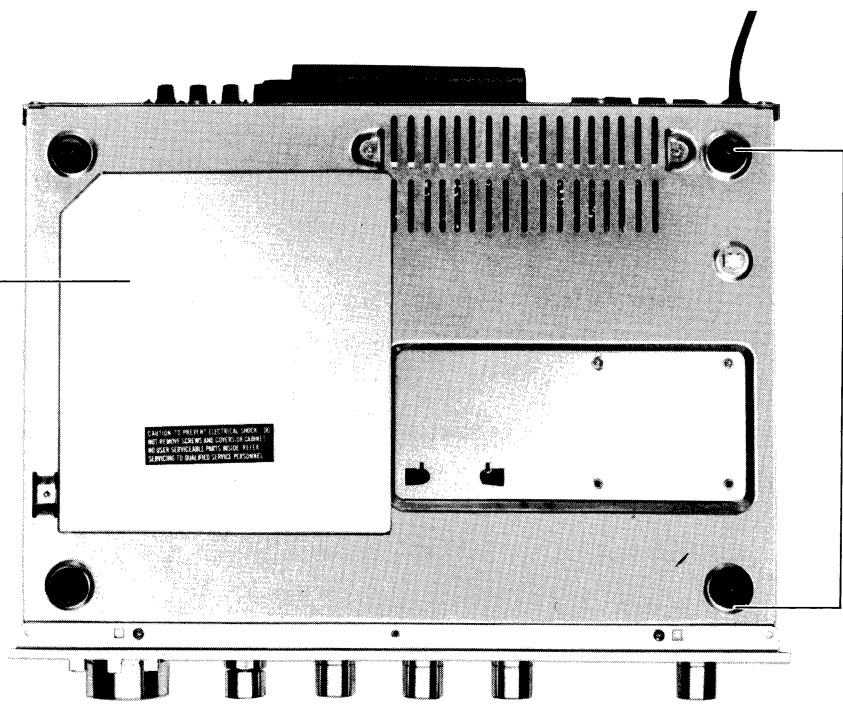


Fig. 10

4. Exploded Views and Part Numbers

4-(1) Front Panel

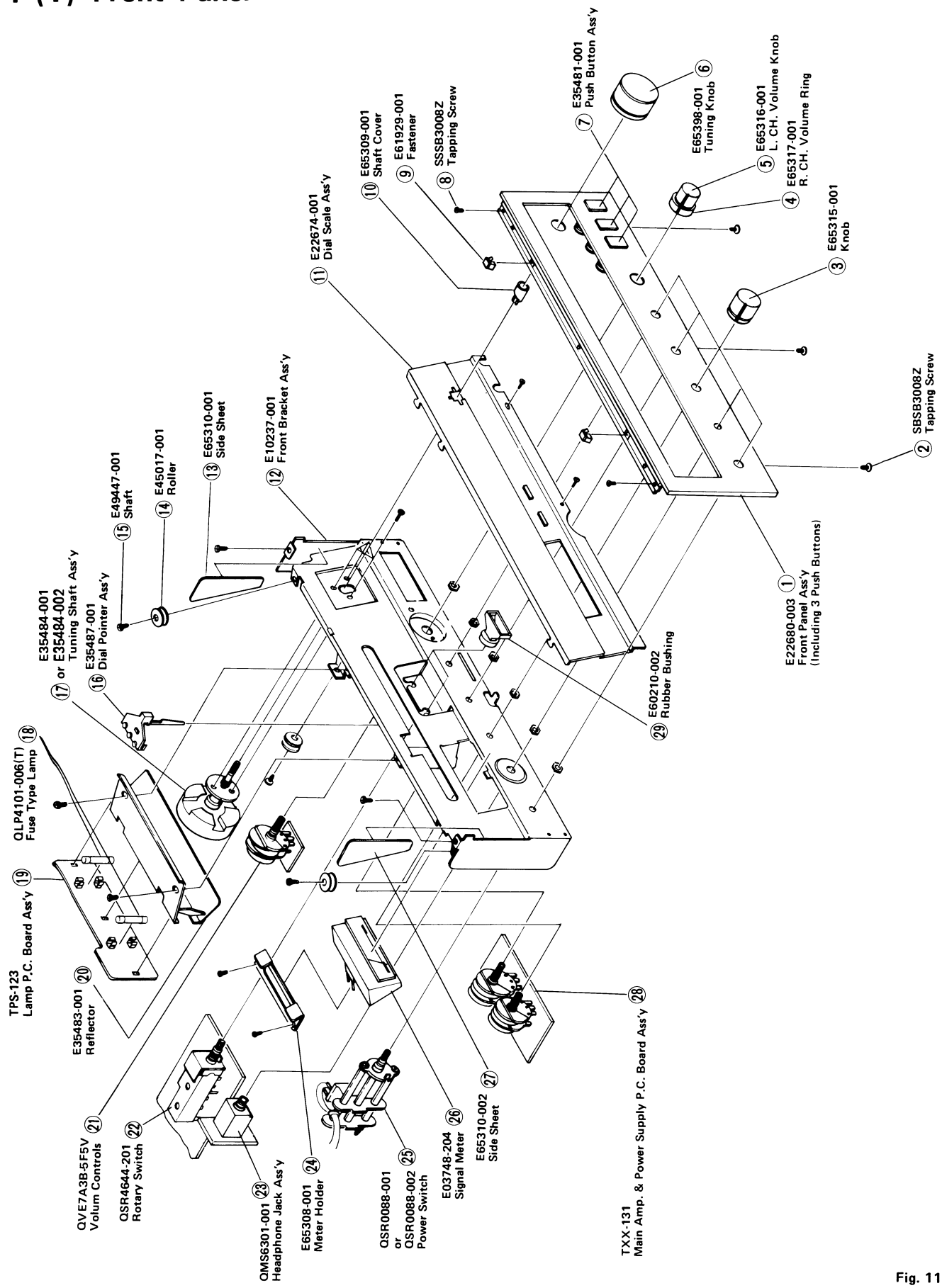

① E22680-003 Front Panel Ass'y (Including 3 Push Buttons)
② SBSB3008Z Tapping Screw
③ E65315-001 Knob
④ E65317-001 R. CH. Volume Ring
⑤ E65316-001 L. CH. Volume Knob
⑥ E65398-001 Tuning Knob
⑦ E35481-001 Push Button Ass'y
⑧ SSSB3008Z Tapping Screw
⑨ E61929-001 Fastener
⑩ E65309-001 Shaft Cover
⑪ E22674-001 Dial Scale Ass'y
⑫ E10237-001 Front Bracket Ass'y
⑬ E65310-001 Side Sheet
⑭ E45017-001 Roller
⑮ E49447-001 Shaft
⑯ E35487-001 Dial Pointer Ass'y
⑰ E35484-001 or E35484-002 Tuning Shaft Ass'y
⑱ QLP4101-006(T) Fuse Type Lamp
⑲ TPS-123 Lamp P.C. Board Ass'y
⑳ E35483-001 Reflector
㉑ QVE7A3B-5F5V Volum Controls
㉒ QSR4644-201 Rotary Switch
㉓ QMS6301-001 Headphone Jack Ass'y
㉔ E65308-001 Meter Holder
㉕ QSR0088-001 or QSR0088-002 Power Switch
㉖ E03748-204 Signal Meter
㉗ E65310-002 Side Sheet
㉘ TXX-131 Main Amp. & Power Supply P.C. Board Ass'y
㉙ E60210-002 Rubber Bushing

Fig. 11

JR-S61H

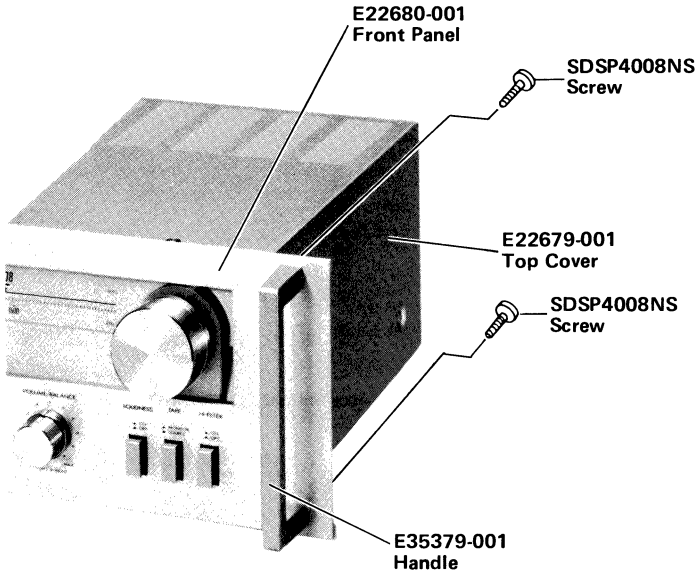


Fig. 12

JR-S61W

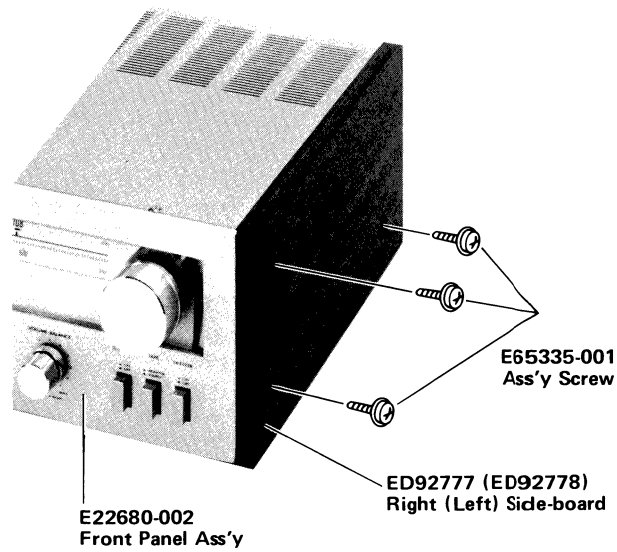


Fig. 13

4-(2) Rear Panel

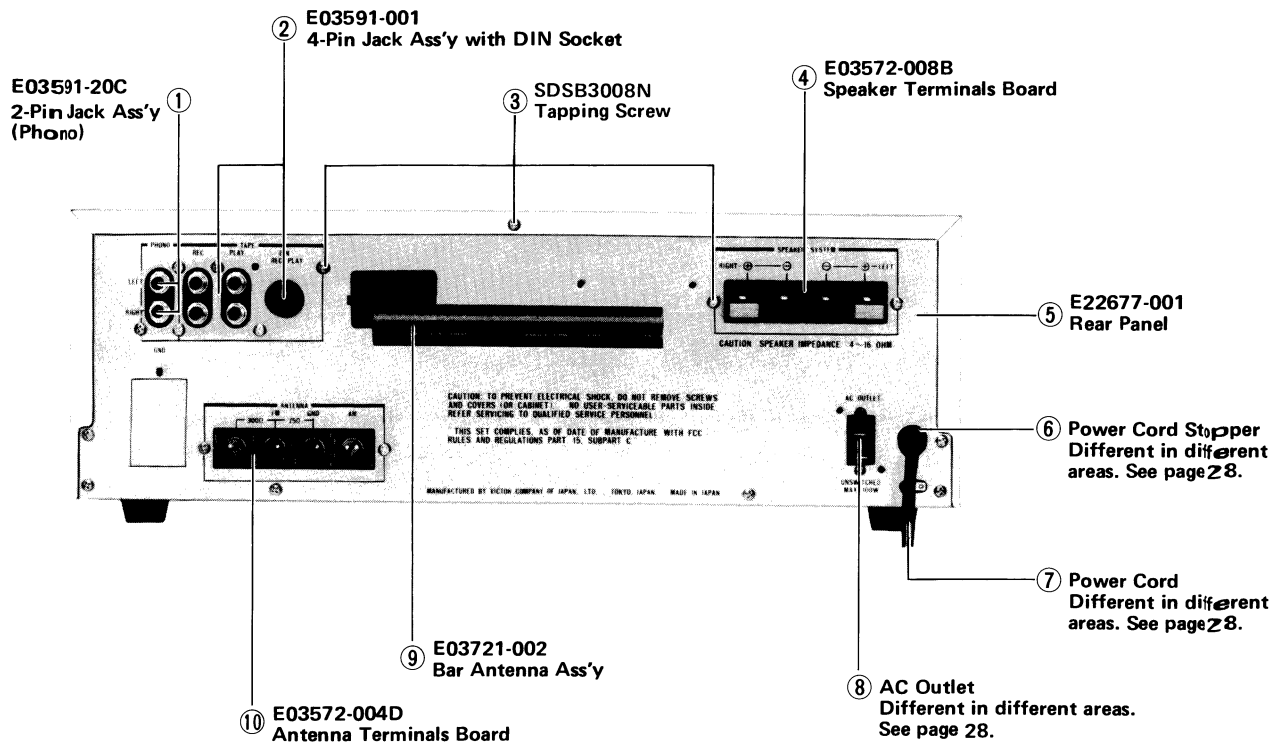


Fig. 14

5. Dial Stringing Procedure

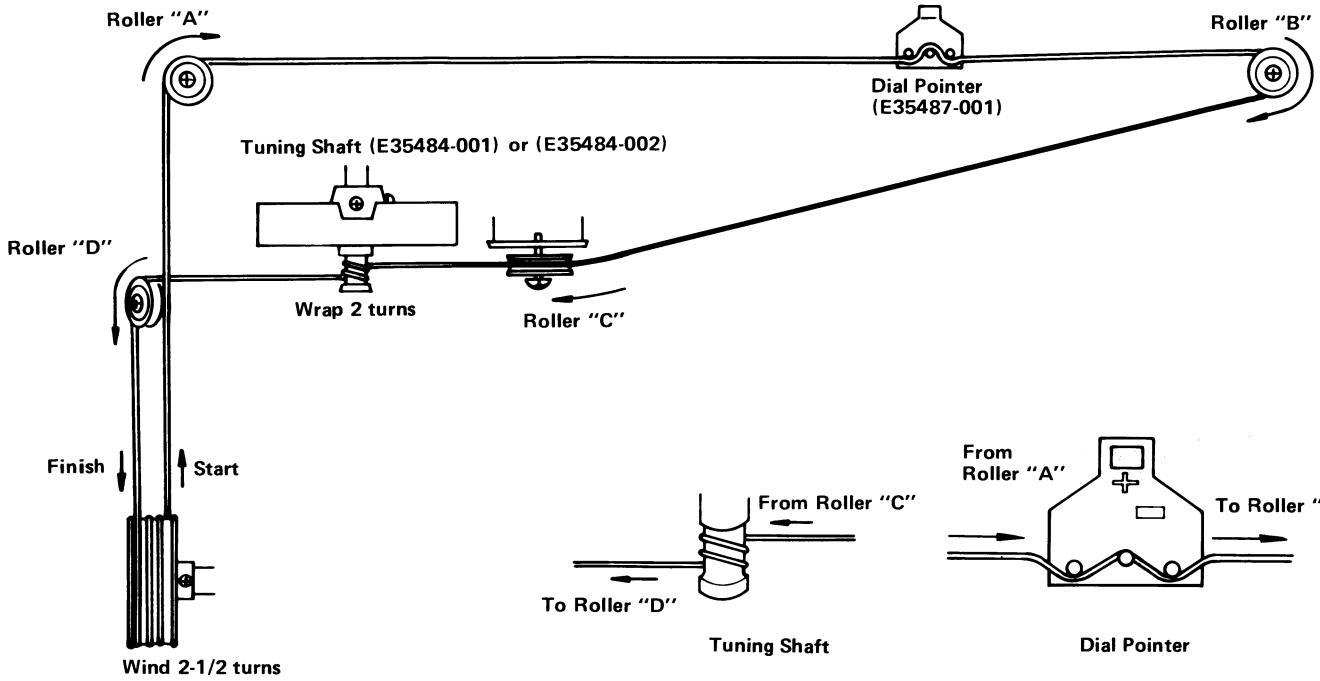


Fig. 15

Fig. 16

Fig. 17

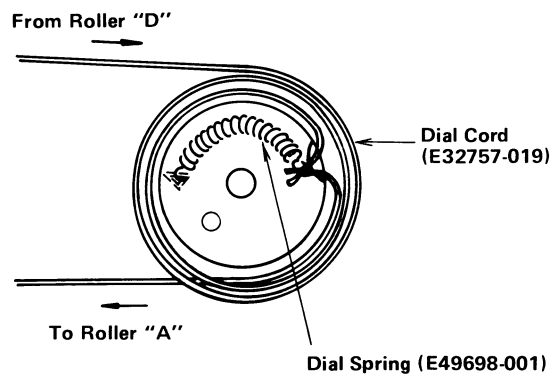
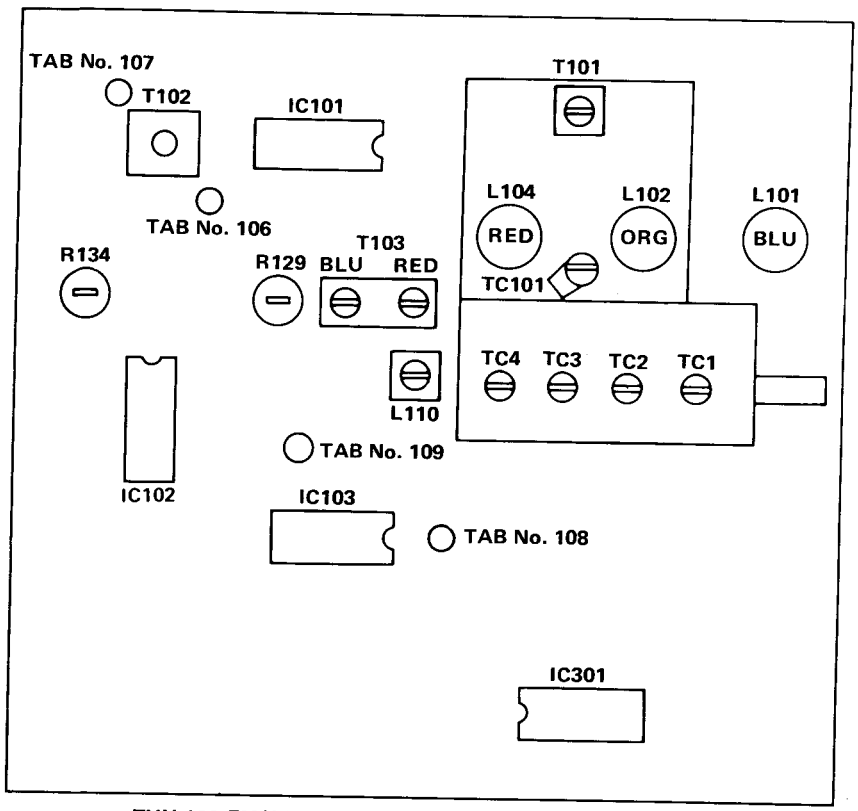


Fig. 18

(1) Remove dial pointer and old dial cord.
(2) Tie end of new dial cord to one end of dial spring, connect other end of dial spring of bottom right eye inside dial drum. See Fig. 18.
(3) Rotate the tuning capacitor dial drum to its maximum counterclockwise.
(4) Run the dial cord through the slot in the rim of the dial drum.
(5) Pull dial cord taut and wrap 2 turns clockwise around tuning shaft. Refer to Fig. 16.
(6) Guide the dial cord under and around rollers "A", "B" and "C". Keep the dial cord taut during this procedure.
(7) Guide the dial cord under the dial drum and wind 2-1/2 turns clockwise. See Fig. 18.
(8) Turn the tuning shaft to rotate the dial drum fully counterclockwise and fully clockwise to distribute the tensioning along the dial cord.
(9) Place the dial cord over and under the tabs on the rear of the dial pointer and place the dial pointer on the top of the dial panel rail. Refer to Fig. 17.
(10) Turn the tuning shaft clockwise. Slide the dial pointer to zero (0) calibration marker on the logging scale while holding tuning shaft fully clockwise. Cement the dial pointer to the dial cord to prevent slippage. Allow cement to dry thoroughly.
(11) Check the dial calibration. Refer to FM/AM Alignment on pages 10, through 12.
(12) Replace the top cover.

6. FM/AM Tuner Alignment Procedures



TXX-126 FM/AM Tuner & Equalizer Amp. P.C. Board Ass'y

Fig. 19

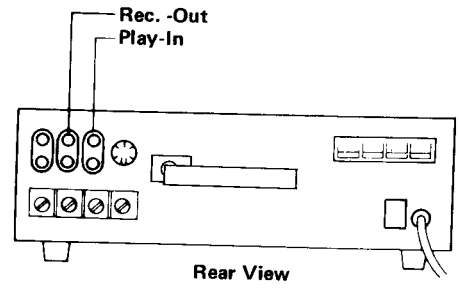
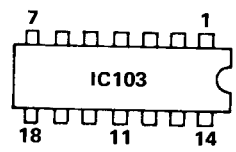


Fig. 20



11th pin for AM IF stage adjustment.

Fig. 21

6-(1) FM Section

Note: Keep the muting push button off during this procedure.

Discriminator, Center Meter, Distortion and Signal Gain

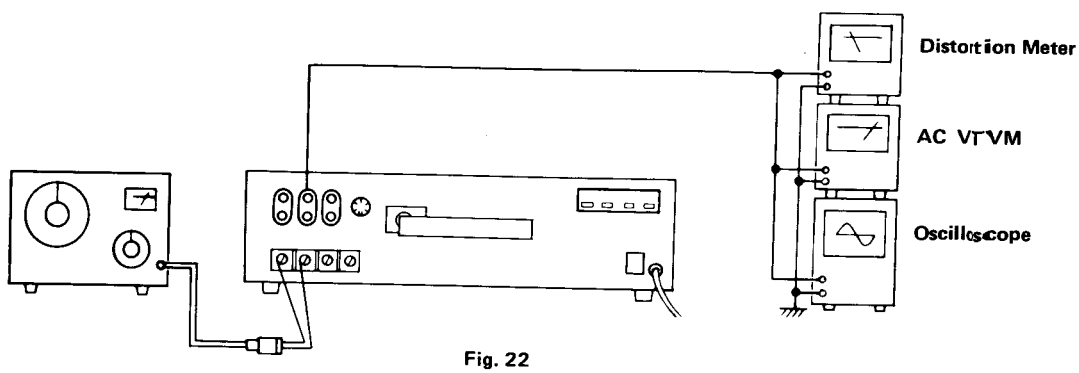


Fig. 22

1. Connect an RF generator, 1 kHz modulation and 75 kHz deviation, to the antenna terminals on the rear panel through a dummy antenna.
2. Connect an oscillascope, distortion meter and AC VTVM to the Rec. Out Jacks on the rear panel.
3. Connect a DC VTVM to Tab No. 107 (Positive) and Tab No. 106 (Ground).
4. Tune to a frequency where there is no broadcasting.
5. Adjust the bottom core of T102 so that the DC VTVM indicates "0" (zero).
6. Set the generator to 98 MHz.
7. Set the dial pointer to 98 MHz.
8. Adjust the top core of T102 so that the distortion is minimized at a value less than 0.4 %.

Tracking and Sensitivity

Precaution: No adjustment is required. The tracking and sensitivity has been adjusted properly and completely at the factory. If any special reason occasioned, take the following procedures very carefully:

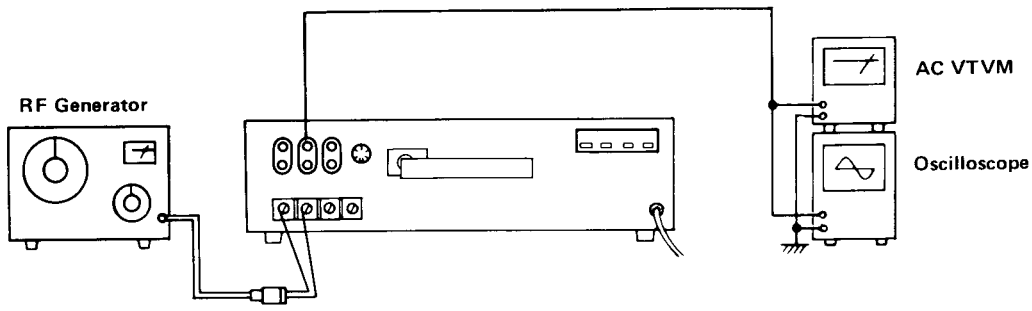


Fig. 23

Low Frequency

1. Connect an RF generator to the antenna terminals on the rear panel through a dummy antenna.
2. Set the RF generator to 88 MHz, a modulation of 1 kHz and a deviation of 75 kHz, to provide an input of 2 μV.
3. Connect a VTVM and an oscilloscope to the Rec. Out Jacks on the rear panel.
4. Set the dial pointer to 88 MHz.
5. Adjust three coils L104, L102 and L101 in the tuning gang to maximize the output.

High Frequency

6. Set the RF generator to 108 MHz, a modulation of 1 kHz and a deviation of 75 kHz, to provide an input of 2 μV.
7. Set the dial pointer to 108 MHz.
8. Adjust the FM trimmers TC101, TC3 and TC1 in the tuning gang to maximize the output.
9. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

Multiplex and Stereo Separation

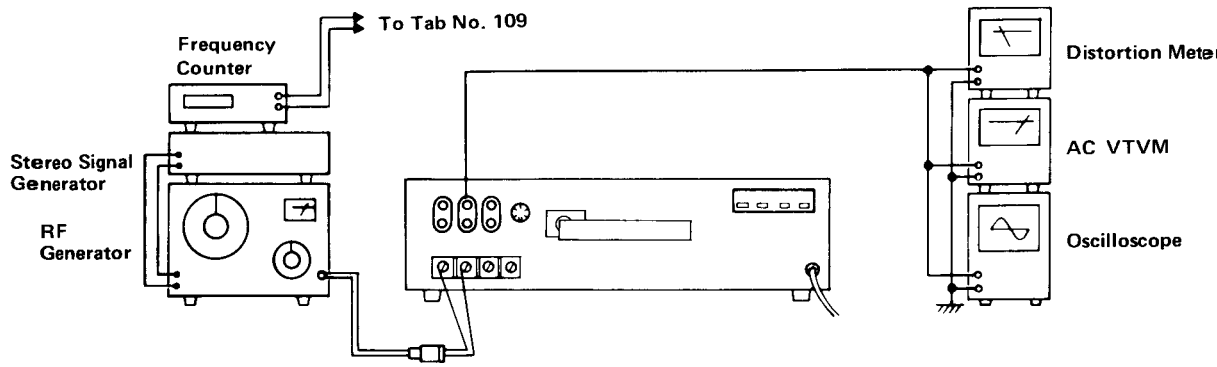


Fig. 24

Multiplex

1. Set a stereo signal generator as follows: Modulation frequency 1 000 Hz, Deviation pilot 7.5 kHz, Main and Sub. 67.5 kHz. Connect its output to an RF generator.
2. Connect the RF generator to the antenna terminals through a dummy antenna.
3. Connect a VTVM, an oscilloscope and a distortion meter to the Rec. Out Jacks.
4. Set the RF generator to 98 MHz and an output of 1 mV.
5. Set the dial pointer to 98 MHz.
6. Connect a frequency counter to Tab No. 109.
7. Switch off the pilot signal of the stereo modulator.
8. Adjust R129 so that the frequency counter indicates 76 kHz (±0.05 kHz).

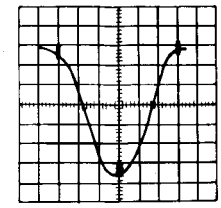
Stereo Separation

9. Switch the selector of the stereo modulator to left channel modulation.
10. Adjust R134 so that the output of the right channel is minimized.
11. Switch the selector of the modulator to right channel modulation.
12. Adjust R134 so that the output of the left channel is minimized.
13. Set R134 to average, if the separation of right and left are different.

6-(2) AM Section

IF Stage

1. Connect an output of sweep generator to the AM input Tab No. 108.
2. Set the sweep generator to the 455 kHz.
3. Connect an input of sweep generator to the AM output 11th pin of IC 103.
4. Adjust the core of I.F. Transformer T102 so that the output is maximized. Refer to Fig. 25.



IF OUTPUT

Fig. 25

Tracking and Sensitivity

Low Frequency

1. Connect an RF generator to the antenna terminals on the rear panel, set this to 600 kHz with 30 % modulation at 400 Hz.
2. Connect an AC VTVM and an oscilloscope to Rec. Out Jacks on the rear panel.
3. Set the dial pointer to 600 kHz.
4. Adjust Osc. transformer L109 and the ferrite bar antenna to maximize the output signal.

High Frequency

5. Set the RF generator to 1 400 kHz with 30 % modulation at 400 Hz.
6. Set the dial pointer to 1 400 kHz.
7. Adjust the trimmers TC4 and TC2 in the AM tuning gang so that the output signal is maximized.
8. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

7. Power Amplifier Adjustment Procedure

Idling Current Adjustment

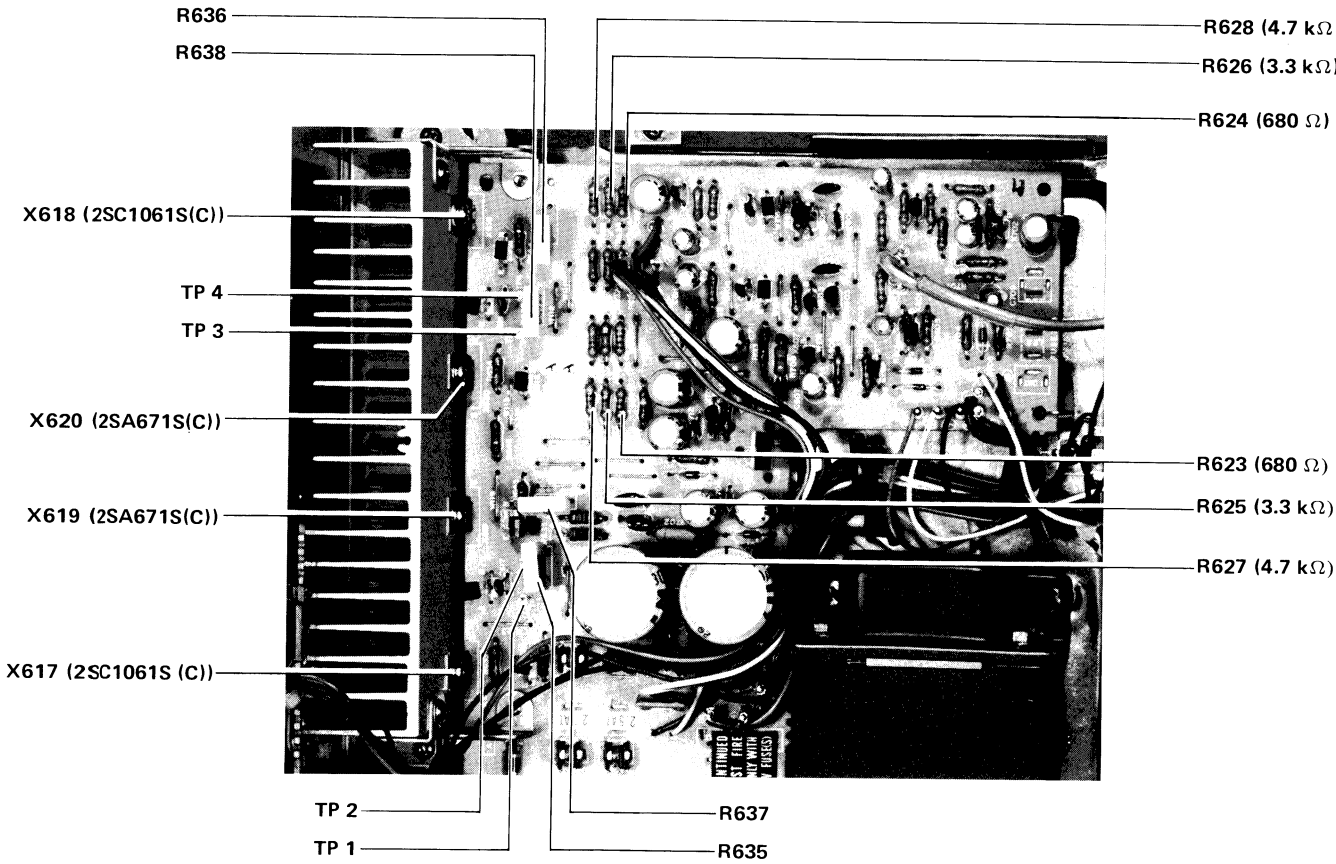


Fig. 26

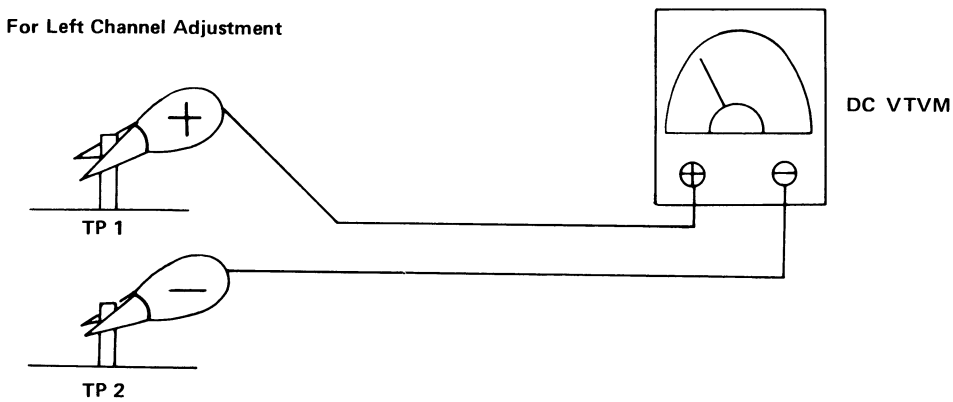


Fig. 27

Idling Current

Precautions:
When the following parts are replaced, idling current adjustment is required.
1. Power and driver transistors X609 through X620.
2. Resistors R621 through R638.

> **Note:** Idling current is obtained by measuring the voltage of the emitter resistor connected to the power transistor. For this purpose, check points Tab No. TP1 (TP2) and TP3 (TP4) are located on TXX-131 P.C. Board. Adjust the resistor(s) of left and right channels for 3 to 20 mV following steps below.

Procedures:
1. Be sure that the following resistors are connected to TXX-131 P.C. Board Ass'y as shown in Fig. 26.

Item No. : Value	R623 (R624) : 680 Ω	R625 (R626) : 3.3 kΩ	R627 (R628) : 4.7 kΩ
Part Number	QRD141J-681	QRD141J-332	QRD141J-472

If one (or more) is (are) disconnected at the factory, connect resistor(s) having the same value as specified above.

2. Connect GND lead wire of DC VTVM to Tab No. TP2 (TP3) and the other lead wire to Tab No. TP1 (TP4). Refer to Fig. 27.
   Precaution: Allow the set to warm up at least 2 minutes before connecting DC VTVM.
3. Read the pointer position of DC VTVM and take the following procedures.

If the DC VTVM pointer position indicates:	Channel (L or R)	Procedures
0 mV – 2 mV	Left Right	Disconnect R625 & R627 (3.3 kΩ & 4.7 kΩ). Disconnect R626 & R628 (3.3 kΩ & 4.7 kΩ).
2.1 mV – 3.5 mV	Left Right	Disconnect R627 (4.7 kΩ). Disconnect R628 (4.7 kΩ).
3.6 mV – 25 mV	Left & Right	Proper Idling Current range.
Over 26 mV	Left Right	Replace R625 (3.3 kΩ) by a 2.2 kΩ resistor. Replace R626 (3.3 kΩ) by a 2.2 kΩ resistor. Repeat procedures 2 and 3.

8. Printed Circuit Board Ass'y and Part Numbers

8-(1) TXX-131 Main Amp. and Power Supply P.C. Board Ass'y

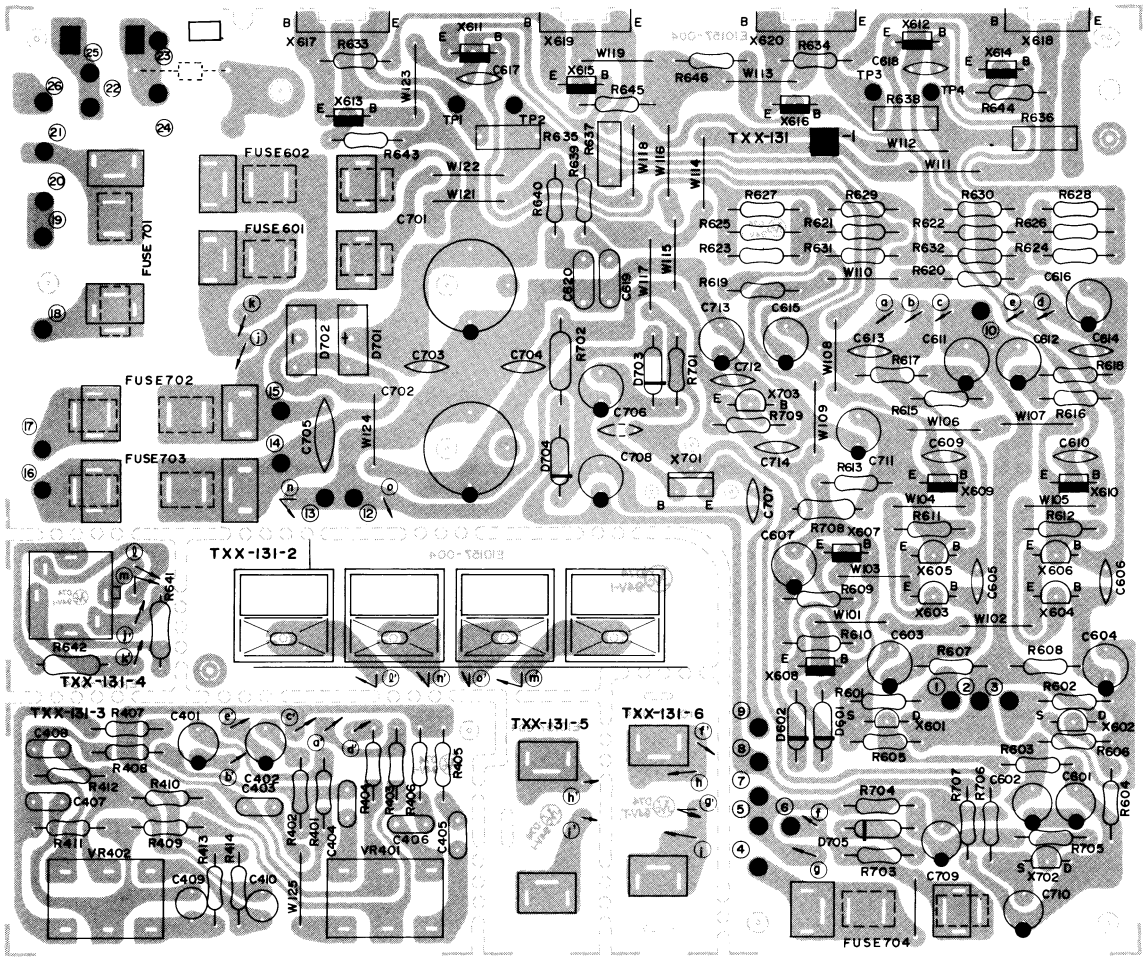


Fig. 28

Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X601	2SK30A-1	IDSS = 3.0 mA		F.E.T.	Toshiba
X602	2SK30A-1	"		"	"
X603	2SC1775AV (F)	300 mW	200 MHz	Silicon	Hitachi
X604	2SC1775AV (F)	"	"	"	"
X605	2SC1775AV (F)	"	"	"	"
X606	2SC1775AV (F)	"	"	"	"
X607	2SC458 (C)	200 mW	230 MHz	"	"
X608	2SC458 (C)	"	"	"	"
X609	2SA673A (C) S	400 mW	120 MHz	"	"
X610	2SA673A (C) S	"	"	"	"
X611	2SC458 (C)	200 mW	230 MHz	"	"
X612	2SC458 (C)	"	"	"	"
X613	2SC1213A (C) S	400 mW	120 MHz	"	"
X614	2SC1213A (C) S	"	"	"	"
X615	2SA673A (C) S	"	"	"	"
X616	2SA673A (C) S	"	"	"	"
X617	2SC1061S (C)	25 W	8 MHz	"	"
X618	2SC1061S (C)	"	"	"	"
X619	2SA671S (C)	"	"	"	"
X620	2SA671S (C)	"	"	"	"
X701	2SD325 (D)	10 W	"	"	Sanyo
X702	2SK30Y			F.E.T.	Toshiba
X703	2SA872AV (D, E)	300 mW	120 MHz	Silicon	Hitachi

Diodes

Item No.	Part Number	Rating	Description	Maker
D601	1S2473		Silicon	Toyo Dengu
D602	1S2473		〃	〃
D701	ESAB02-02C		〃	Kyodo Denki
D702	ESAB02-02N		〃	〃
D703	WZ-130		Zener	Fuji
D704	WZ-130		〃	〃
D705	1S2473		Silicon	Toyo Dengu

Capacitors

Item No.	Part Number	Rating		Description
C401	QEW61CA-106	10 μF	16 V	Electrolytic
C402	QEW61CA-106	〃	〃	〃
C403	QFM31HK-222Z	0.0022 μF	50 V	Mylar
C404	QFM31HK-222Z	〃	〃	〃
C405	QFM31HK-223	0.022 μF	〃	〃
C406	QFM31HK-223Z	〃	〃	〃
C407	QFM31HK-333Z	0.033 μF	〃	〃
C408	QFM31HK-333Z	〃	〃	〃
C409	QEZ0046-224	0.22 μF	〃	Electrolytic
C410	QEZ0046-224	〃	〃	〃
C601	QEW51AA-476	47 μF	10 V	〃
C602	QEW61AA-476Z	〃	〃	〃
C603	QEW61HA-474Z	0.47 μF	50 V	〃
C604	QEW61HA-474Z	〃	〃	〃
C605	QCS31HJ-331	330 pF	〃	Ceramic
C606	QCS31HJ-331	〃	〃	〃
C607	QEW61AA-476Z	47 μF	10 V	Electrolytic
C609	QCS31HJ-330	33 pF	50 V	Ceramic
C610	QCS31HJ-330	〃	〃	〃
C611	QEW61AA-476Z	22 pF	〃	〃
C612	QEW61AA-476Z	〃	〃	〃
C613	QCS31HJ-220Z	22 pF	〃	〃
C614	QCS31HJ-220Z	〃	〃	〃
C615	QEW51HA-226	22 μF	〃	Electrolytic
C616	QEW51HA-226	〃	〃	〃
C617	QCS31HJ-470Z	47 pF	〃	Ceramic
C618	QCS31HJ-470Z	〃	〃	〃
C619	QFM31HK-473	0.047 μF	〃	Mylar
C620	QFM31HK-473	〃	〃	〃
C701	QEW81VA-478	4700 μF	35 V	Electrolytic
C702	QEW81VA-478	〃	〃	〃
C703	QCF31HP-103Z	0.01 μF	50 V	Ceramic
C704	QCF31HP-103	〃	〃	〃
C705	QCF12HP-103	0.01 μF	500 V	〃
C706	QEW41EA-107	100 μF	25 V	Electrolytic
C707	QCF31HP-103Z	0.01 μF	50 V	Ceramic
C708	QEW51EA-107	100 μF	25 V	Electrolytic
C709	QEW61HA-105Z	1 μF	50 V	〃
C710	QEW61HA-106Z	10 μF	〃	〃
C711	QEW51VA-107	100 μF	35 V	〃
C712	QCS31HJ-220Z	22 pF	50 V	Ceramic
C713	QEW41VA-107	100 μF	35 V	Electrolytic
C714	QCF31HP-223	0.022 μF	50 V	Ceramic

Resistors

Item No.	Part Number	Rating		Description
R401	QRD141J-562	5.6 kΩ	1/4 W	Carbon
R402	QRD141J-562	"	"	"
R403	QRD141J-472	4.7 kΩ	"	"
R404	CRD141J-472	"	"	"
R405	QRD141J-561	560 Ω	"	"
R406	QRD141J-561	"	"	"
R407	QRD141J-123	12 kΩ	"	"
R408	QRD141J-123	"	"	"
R409	QRD141J-182	1.8 kΩ	"	"
R410	QRD141J-182	"	"	"
R411	QRD141J-823	82 kΩ	"	"
R412	QRD141J-823	"	"	"
R413	QRD141J-182	1.8 kM	"	"
R414	QRD141J-182	"	"	"
R601	QRD141J-223	22 kΩ	"	"
R602	QRD141J-223	"	"	"
R603	QRD141J-223	"	"	"
R604	QRD141J-223	"	"	"
R605	QRD141J-104	100 kΩ	"	"
R606	QRD141J-104	"	"	"
R607	QRD141J-124	120 kΩ	"	"
R608	QRD141J-124	"	"	"
R609	QRD141J-331	330 Ω	"	"
R610	QRD141J-331	"	"	"
R611	QRD141J-102	1 kΩ	"	"
R612	QRD141J-102	"	"	"
R613	QRD141J-333	33 kΩ	"	"
R615	QRD141J-681	680 Ω	"	"
R616	QRD141J-681	"	"	"
R617	QRD141J-563	56 kΩ	"	"
R618	QRD141J-563	"	"	"
R619	QRD141J-392	3.9 kΩ	"	"
R620	QRD141J-392	"	"	"
R621	QRD141J-331	330 Ω	"	"
R622	QRD141J-331	"	"	"
R623	QRD141J-681	680 Ω	"	"
R624	QRD141J-681	"	"	"
R625	QRD141J-332	3.3 kΩ	"	"
R626	QRD141J-332	"	"	"
R627	QRD141J-472	4.7 kΩ	"	"
R628	QRD141J-472	"	"	"
R629	QRD141J-331	330 Ω	"	"
R630	QRD141J-331	"	"	"
R631	QRD141J-272	2.7 kΩ	"	"
R632	QRD141J-272	"	"	"
R633	QRD141J-471	470 Ω	"	"
R634	QRD141J-471	"	"	"
R635	QRM024K-R47	0.47 Ω	2 W	Metal Plate
R636	QRM024K-R47	"	"	"
R637	QRM024K-R47	"	"	"
R638	QRM024K-R47	"	"	"
R639	QRD126J-100	10 Ω	1/2 W	Uninflammable Carbon
R640	QRD126J-100	"	"	"
R641	QRD126J-181	180 Ω	"	"
R642	QRD126J-181	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R643	QRX129J-100	10 Ω	1/2 W	Uninflammable O.M.F.
R644	QRX129J-100	"	"	"
R645	QRX129J-100	"	"	"
R646	QRX129J-100	"	"	"
R701	QRD141J-222	2.2 kΩ	1/4 W	Carbon
R702	QRG017J-681S	680 Ω	1 W	Oxied Metal Film
R703	QRD141J-222	2.2 kΩ	1/4 W	Carbon
R704	QRD141J-223	22 kΩ	"	"
R705	QRD141J-104	100 kΩ	"	"
R706	QRD141J-562	5.6 kΩ	"	"
R707	QRD141J-104	100 kΩ	"	"
R708	QRD126J-680	68 Ω	1/2 W	Uninflammable Carbon
R709	QRD141J-103	10 kM	1/4 W	Carbon
R715	QRD126J-220	220 Ω	1/2 W	Uninflammable Carbon

Others

Item No.	Part Number	Rating	Description
	E03572-008B		Speaker Terminal
	QMS6301-001		Jack Ass'y
VR401	QVC3A2C-215V	250 kΩ	Variable Resistor
VR402	QVC3A2C-2155V		"
	E34926-001		Heat Sink

The TXX-131 has specified numbers for each designated area.
All parts other than the one below have identical corresponding numbers.

TXX-131A, B, C,			
Item No.	**Part Number**	**Rating**	**Description**
	E455525-001		Contact Clip

TXX-131D, EBS			
Item No.	**Part Number**	**Rating**	**Description**
	E48965-002		Contact Clip

8-(2) TPS-123 Lamp P.C. Board Ass'y

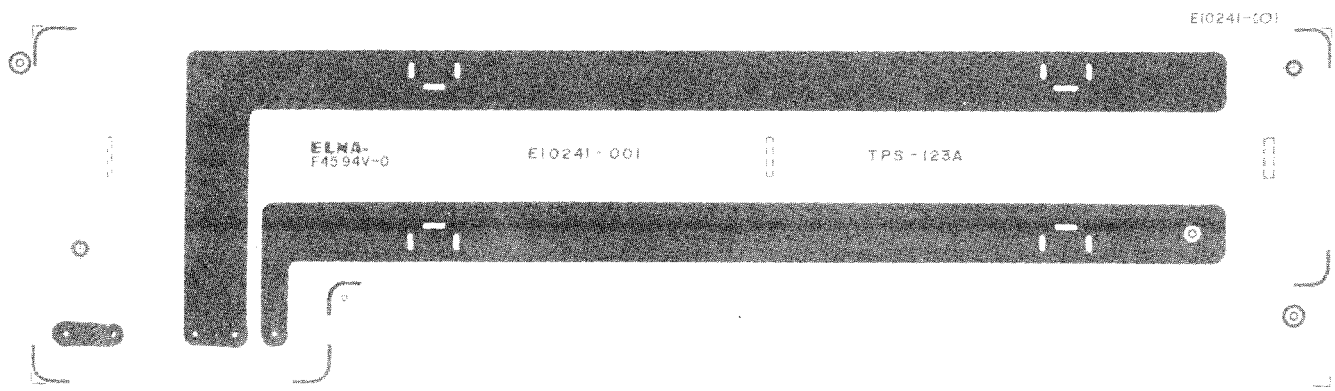


Fig. 29

Item No.	Part Number	Rating	Description
R901	QRG017J-221	1 W	Uninflammable Carbon
	E45524-001		Contact Clip

8-(3) TXX-126 FM/AM Tuner & Equalizer Amp. P.C. Board Ass'y

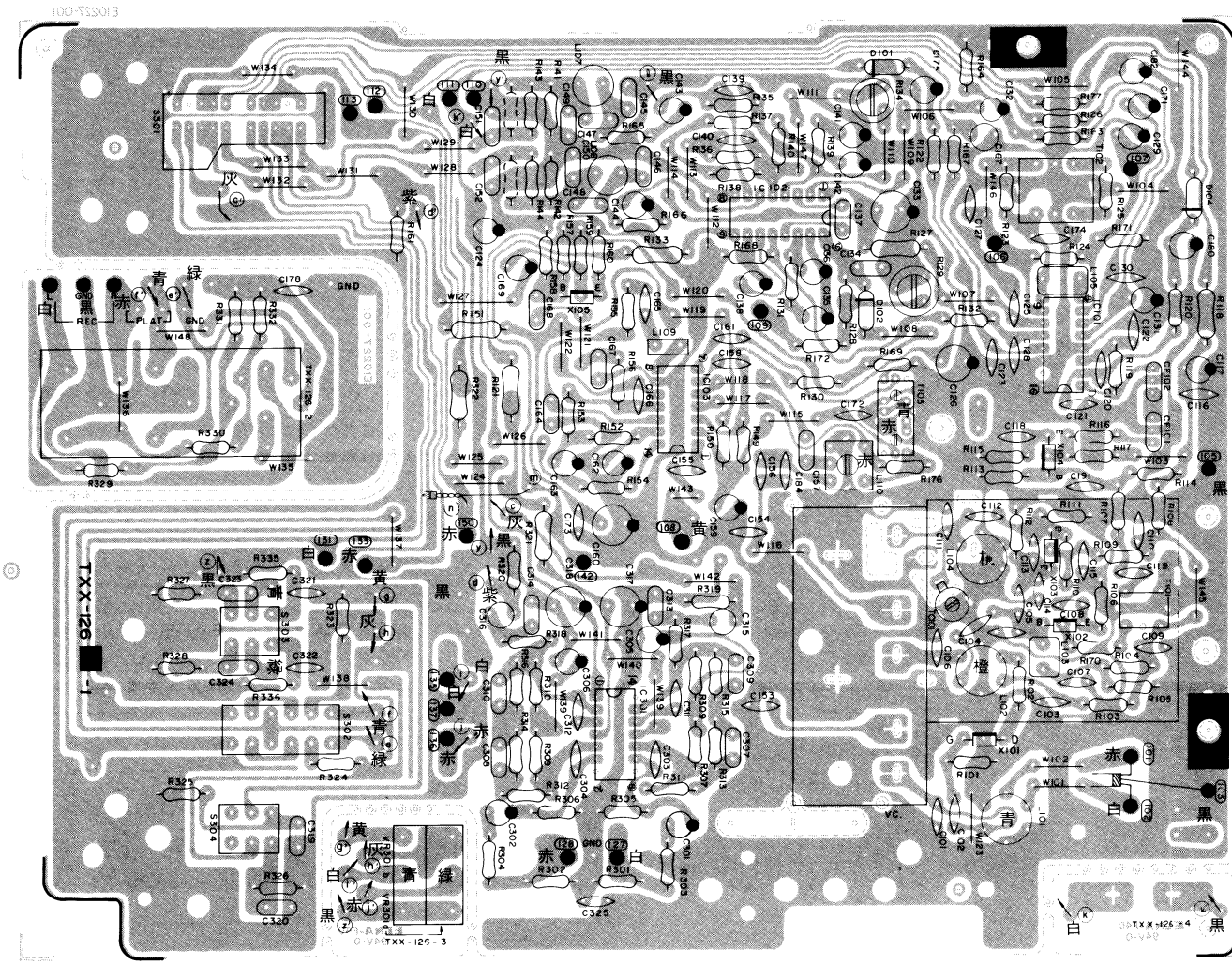


Fig. 30

Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X101	2SK55D	IDSS: 3 – 7 mA, NF: 3.5 dB (f = 100 MHz)		F.E.T.	Hitachi
X102	2SC535 (B, C)	100 mW	940 MHz	Silicon	"
X103	2SC1342 (B, C)	"	250 MHz	"	"
X104	2SC535 (C)	"	940 MHz	"	"
X105	2SC458 (C)	200 mV	230 MHz	"	"

Integrated Circuits

Item No.	Part Number	Rating	Description	Maker
IC101	HA1137W	550 mW	I.C.	Hitachi
IC102	HA1196	490 mW	"	"
IC103	HA1151	500 mW	"	"
IC301	HA1452W	540 mW	"	"

Diodes

Item No.	Part Number	Rating	Description	Maker
D101	1S2473		Silicon	Toyo Dengu
D102	1S2473		"	"
D104	1S2473		"	"

Coils & Transformers

Item No.	Part Number	Rating	Description
L101	E03477-024		RF Coil
L102	E03477-35		"
L103	E03522-2R2KY	2.2 μH	Choke Coil
L104	E03477-026		RF Coil
L105	E03522-180J	18 μH	FM Det. Coil
L107	E03566-103		Ferri Inductor
L108	E03566-103		"
L109	E03522-391KY	390 μH	Choke Coil
L110	E03079-29		AM OSC Coil
T101	E03078-39		FM I.F. Transformer
T102	E03134-025		FM Detector Transformer
T103	E03613-002		AM I.F. Transformer

Filters

Item No.	Part Number	Rating	Description
CF101	E03357-009		Ceramic Filters
CF102	E03357-009		"

Capacitors

Item No.	Part Number	Rating		Description
C101	QCS31HJ-150Z	15 pF	50 V	Ceramic
C102	QCS31HJ-101Z	100 pF	"	"
C103	QCS31HJ-103UZ	0.01 μF	"	"
C104	QCS31HJ-4R0Z	4 pF	"	"
C105	QCS31HJ-4R0Z	4 pF	"	"
C106	QCS31HJ-150Z	15 pF	"	"
C107	QCS31HJ-101Z	100 pF	"	"
C108	QCS31HJ-103UZ	0.01 μF	"	"
C109	QCS31HJ-103UZ	0.01 μF	"	"
C110	QCS31HJ-103UZ	"	"	"
C111	QCT25SH-220Z	22 pF	16 V	"
C112	QCT25CH-7R0Z	7 pF	"	"
C113	QCT25CH-220Z	22 pF	"	"
C114	QCT25CH-100Z	10 pF	"	"
C115	QCF31HP-103UZ	0.01 μF	50 V	"
C116	QCF31HP-223Z	0.022μF	"	"
C117	QEW61CA-106Z	10 μF	16 V	Electrolytic
C118	QCF31HP-223Z	0.022 μF	50 V	Ceramic
C119	QCF31HP-223Z	0.022 μF	"	"
C120	QCZ0107-473	0.047 μF	0.25 V	"
C121	QCF31HP-223Z	0.022 μF	50 V	"
C122	QCZ0107-473	0.047 μF	25 V	"
C123	QCF31HP-223Z	0.022 μF	50 V	"
C124	QEW61AA-227Z	220 μF	10 V	Electrolytic
C125	QCF31HP-223Z	0.022 μF	50 V	Ceramic
C126	QEW61CA-107Z	100 μF	16 V	Electrolytic
C127	QCF31HP-223Z	0.022 μF	50 V	Ceramis
C128	QCF31HP-223Z	"	"	"
C129	QEW61HA-105Z	1 μF	"	"
C130	QCS31HJ-330Z	33 pF	"	"
C131	QEW61CA-106Z	10 μF	16 V	Electrolytic
C132	QEW61HA-225Z	2.2 μF	50 V	"
C133	QEW61CA-227Z	220 μF	16 V	"
C134	QFP31HJ-361	360 pF	50 V	Polystyrene
C135	QEB51EM-335	3.3 μF	25 V	Electrolytic

Capacitors

Item No.	Part Number	Rating		Description
C136	QEB51EM-225	2.2 μF	25 V	Electrolytic
C137	QFM31HK-473Z	0.047 μF	50 V	Mylar
C138	QEB51HM-224	0.22 μF	"	Electrolytic
C139	QCS31HJ-471Z	470 pF	"	Ceramic
C140	QCS31HJ-471Z	"	"	"
C141	QEW61CA-106Z	10 μF	16 V	Electrolytic
C142	QEW61CA-106Z	"	"	"
C143	QEW61HA-225Z	2.2 μF	50 V	"
C144	QEW61HA-225Z	"	"	"
C145	QFM31HK-822Z	8 200 pF	"	Mylar
C146	QFM31HK-822Z	"	"	"
C147	QFM31HK-682Z	6 800 pF	"	"
C148	QFM31HK-682Z	6 800 pF	"	"
C149	QFM31HK-273Z	0.027 μF	"	"
C150	QFM31HK-273Z	"	"	"
C151	QFM31HK-822Z	8 200 pF	"	"
C152	QFM31HK-822Z	"	"	"
C153	QCS31HJ-5R0Z	5 pF	"	Ceramic
C154	QCS31HJ-150Z	15 pF	"	"
C155	QCF31HP-223Z	0.022 μF	"	"
C156	QCS31HJ-331Z	330 pF	"	"
C157	QFM31HK-103Z	0.01 μF	"	Mylar
C158	QCF31HP-223Z	0.022 μF	"	"
C159	QEW61CA-106Z	10 μF	16 V	Electrolytic
C160	QEW61CA-476Z	47 μF	"	"
C161	QCF31HP-223Z	0.022μF	50 V	Ceramic
C162	QEW61EA-106Z	10 μF	25 V	Electrolytic
C163	QEW61CA-106Z	10 μF	16 V	"
C164	QEM31HK-102Z	1 000 pF	50 V	Mylar
C165	QCS31HJ-331Z	330 pF	"	Ceramic
C166	QCF31HP-223Z	0.022 μF	"	"
C167	QFM31HK-332Z	3 300 pF	"	Mylar
C168	QFM31HK-183Z	0.018 μF	"	"
C169	QEW61HA-474Z	0.47 μF	"	Electrolytic
C171	QEW61HA-475Z	4.7 μF	"	"
C172	QCF31HP-223Z	0.022 μF	"	Ceramic
C173	QCF31HP-223Z	0.022 μF	"	"
C182	QEW61HA-105Z	1 μF	"	Electrolytic
C301	QEW61HA-475Z	4.7 μF	"	"
C302	QEW61HA-475Z	"	"	"
C303	QCS31HJ-101Z	100 pF	"	Ceramic
C304	QCS31HJ-101Z	"	"	"
C305	QEW61AA-476Z	47 μF	10 V	Electrolytic
C306	QEW61AA-476Z	"	"	"
C307	QFM31HK-182Z	1 800 pF	50 V	Mylar
C308	QFM31HK-182Z	"	"	"
C309	QFM31HK-682Z	6 800 pF	"	"
C310	QFM31HK-682Z	"	"	"
C311	QCS31HJ-151Z	150 pF	"	Ceramic
C312	QCS31HJ-151Z	"	"	"
C313	QFM31HK-332Z	3 300 pF	"	Mylar
C314	QFM31HK-332Z	"	"	"
C315	QEZ0046-475	4.7 μF	"	Electrolytic
C316	QEZ0046-475	"	"	"
C317	QEW61CA-476Z	47 μF	16 V	"
C318	QEW61CA-476Z	"	"	"

Capacitors

Item No.	Part Number	Rating		Description
C319	QFM31HK-562Z	5 600 pF	50 V	Mylar
C320	QFM31HK-562Z	"	"	"
C321	QCS31HJ-221Z	220 pF	"	Ceramic
C322	QCS31HJ-221Z	"	"	"
C323	QFM31HK-273Z	0.027 μF	50 V	Mylar
C324	QFM31HK-273Z	"	"	"
C325	QCF31HP-223Z	0.022 μF	"	Ceramic
TC101	QAT3001-005			Trimmer
	QAA2234-001			Tuning Hang Capacitor

Resistors

Item No.	Part Number	Rating		Description
R101	QRD141J-105S	1 MΩ	1/4 W	Carbon
R102	QRD141J-470S	47 Ω	"	"
R103	QRD141J-101S	100 Ω	"	"
R104	QRD141J-223S	22 kΩ	"	"
R105	QRD141J-562S	5.6 kΩ	"	"
R106	QRD141J-102S	1 kΩ	"	"
R108	QRD141J-470S	47 Ω	"	Uninflammable Carbon
R109	QRD141J-561S	560 Ω	"	Carbon
R110	QRD141J-103S	10 kΩ	"	"
R111	QRD141J-682S	6.8 kΩ	"	"
R112	QRD141J-222S	2.2 kΩ	"	"
R113	QRD141J-821S	820 Ω	"	"
R114	QRD141J-332S	3.3 kΩ	"	"
R115	QRD141J-102S	1 kΩ	"	"
R116	QRD141J-470S	47 Ω	"	"
R117	QRD141J-331S	330 Ω	"	"
R118	QRD126J-220	22 Ω	1/2 W	Uninflammable Carbon
R119	QRD141J-331S	330 Ω	1/4 W	Carbon
R120	QRD141J-474S	470 kΩ	"	"
R121	QRD126J-100	10 Ω	1/2 W	Uninflammable Carbon
R122	QRD141J-153S	15 kΩ	1/4 W	Carbon
R123	QRD141J-123S	12 kΩ	"	Carbon
R124	QRD141J-822S	8.2 kΩ	1/4 W	"
R125	QRD141J-222S	2.2 kΩ	"	
R126	QRD141J-123S	12 kΩ	"	
R127	QRD126J-330	33 Ω	1/2 W	Uninflammable Carbon
R128	QRD141J-223S	22 kΩ	1/4 W	Carbon
R129	QVP4AOB-103	10 kΩ		Variable
R130	QRD141J-103S	10 kΩ	1/4 W	Carbon
R131	QRD141J-102S	1 kΩ	"	"
R132	QRD141J-104S	100 kΩ	"	"
R133	QRD126J-221	220 Ω	1/2 W	Uninflammable Carbon
R134	QVP4AOB-474	470 kΩ		Variable
R135	QRD141J-473S	47 kΩ	1/4 W	Carbon
R136	QRD141J-473S	47 kΩ	"	"
R137	QRD141J-303S	30 kΩ	"	"
R138	QRD141J-303S	30 kΩ	"	"
R139	QRD141J-223S	22 kΩ	"	"
R140	QRD141J-223S	"	"	"
R141	QRD141J-103S	10 kΩ	1/4 W	Carbon
R142	QRD141J-103S	"	"	"
R143	QRD141J-122S	1.2 kΩ	"	"
R144	QRD141J-122S	"	"	"
R146	QRD141J-332S	3.3 kΩ	"	"
R149	QRD141J-472S	4.7 kΩ	"	"

Resistors

Item No.	Part Number	Rating		Description
R150	QRD141J-151S	150 Ω	1/4 W	Carbon
R151	QRD126J-101	100 Ω	1/2 W	Uninflammable Carbon
R152	QRD141J-103S	10 kΩ	1/4 W	Carbon
R153	QRD141J-103S	"	"	"
R154	QRD141J-152S	1.5 kΩ	"	"
R155	QRD141J-331S	330 Ω	"	"
R156	QRD141J-103S	10 kΩ	"	"
R157	QRD141J-224S	220 kΩ	"	Carbon
R158	QRD141J-683S	68 kΩ	"	"
R159	QRD141J-472	4.7 kΩ	"	"
R160	QRD141J-182S	1.8 kΩ	"	"
R161	QRD141J-473S	47 kΩ	"	"
R163	QRD141J-472S	4.7 kΩ	"	"
R164	QRD141J-153S	15 kΩ	"	"
R165	QRD141J-152S	1.5 kΩ	"	"
R166	QRD141J-152S	"	"	"
R167	QRD141J-472S	4.7 kΩ	"	"
R168	QRD141J-563S	56 kΩ	"	"
R169	QRD141J-103S	10 kΩ	"	"
R170	QRD141J-101S	100 Ω	"	"
R171	QRD141J-154S	150 kΩ	"	"
R172	QRD141J-104S	100 kΩ	"	"
R176	QRD141J-561S	560 Ω	"	"
R177	QRD141J-472S	4.7 kΩ	"	"
R301	QRD141J-104S	100 kΩ	"	"
R302	QRD141J-104S	100 kΩ	"	"
R303	QRD141J-222S	2.2 kΩ	"	"
R304	QRD141J-222S	"	"	"
R305	QRD141J-104S	100 kΩ	"	"
R306	QRD141J-104S	"	"	"
R307	QRD141J-681S	680 Ω	"	"
R308	QRD141J-681S	"	"	"
R309	QRD141J-564S	560 kΩ	"	"
R310	QRD141J-564S	"	"	"
R311	QRD141J-182S	1.8 kΩ	1/4 W	Carbon
R312	QRD141J-182S	"	"	"
R313	QRD141J-393S	39 kΩ	"	"
R314	QRD141J-393S	"	"	"
R315	QRD141J-474S	470 kΩ	"	"
R316	QRD141J-474S	"	"	"
R317	QRD141J-470S	47 Ω	"	"
R318	QRD141J-470 S	"	"	"
R319	QRD141J-104S	100 kΩ	"	"
R320	QRD141J-104S	"	"	"
R321	QRD126J-101	100 Ω	1/2 W	Uninflammable Carbon
R322	QRD126J-101	"	"	"
R323	QRD141J-472S	4.7 kΩ	1/4 W	Carbon
R324	QRD141J-472S	"	"	"
R325	QRD141J-564S	560 kΩ	"	"
R326	QRD141J-564S	560 kΩ	1/4 W	Carbon
R327	QRD141J-223S	22 kΩ	"	"
R328	QRD141J-223S	"	"	"
R329	See page 24.			
R330	"			
R335	QRD141J-564S	560 kΩ	"	Carbon
R336	QRD141J-564S	"	"	"
R331	See page 24.			
R332	"			
VR301	QVE7A3B-5F5V			Variable Resistor

Others

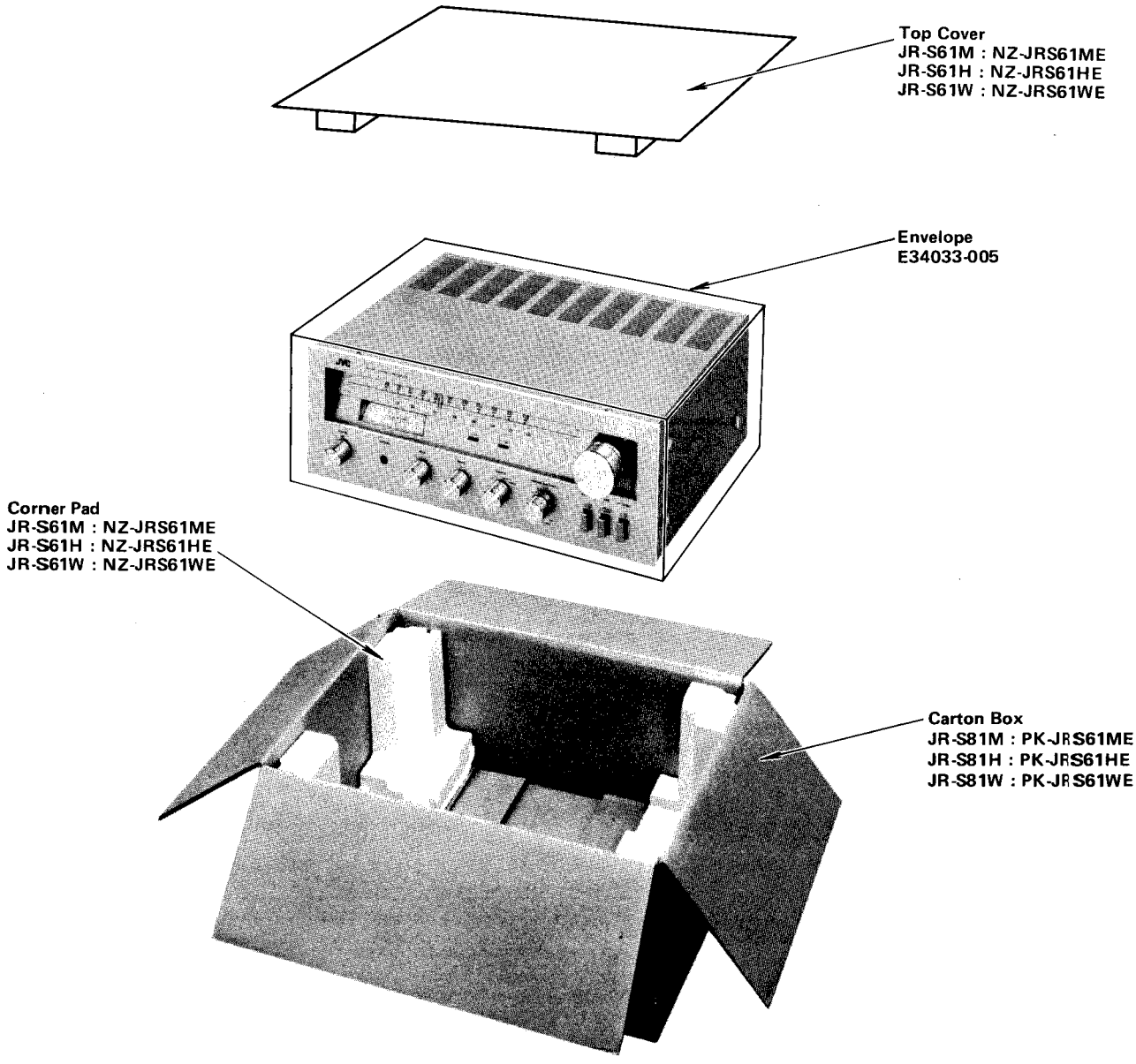
Item No.	Part Number	Rating		Description
CF101	E03357-009			Ceramic Filter
CF102	E03357-009			"
TC101	QAT3001-005			Trimmer
VR301	QVE7A3B-5F5V	250 kΩ	(B)	Variable Resistor
S301	QSR4644-201			Slide Rotary Switch
S302	QSP0231-007			Push Switch
	QLP3104-106			Indicator Lamp
	QAA2234-001			Variable Capacitor
	E33535-004			Shield Cover
	E60700-001			Ground Plate

The following parts have different numbers between the TXX-126A and the TXX-126B.
All other parts have identical corresponding numbers.

TXX-126A				
Item No.	**Part Number**	**Rating**		**Description**
	E03591-40D			Pin Jack Ass'y (4P)

TXX-126B				
Item No.	**Part Number**	**Rating**		**Description**
	E03591-001			Pin Jack Ass'y (4P, DIN)
	QCF31HP-223	0.022 μF	50 V	Ceramic
R329	QRD141J-334S	330 kΩ	1/4 W	Carbon
R330	QRD141J-334S	"	"	"
R331	QRD141J-104S	100 kΩ	"	"
R332	QRD141J-104S	"	"	"

9. Packing Materials and Part Numbers



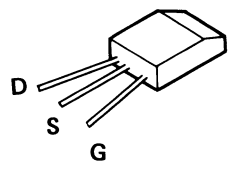
10. Accessories List

Part Number	Description	Q'ty
See page 28	Instruction Book	1
See page 28	Warranty Card	1
E64207-002	Envelope for Instruction Book and Warranty Card	1
BT20024	"Do It Better" (for U.S.A. only)	1
BT20023	Service Procedures (for U.S.A. only)	1
E03614-002	FM Antenna (for U.K., Australia and Europe only)	1
QMF60R1-2R3	2.3 A Fuse (for 120 V, used in Military Market only)	1
QMF60R1-1R2	1.2 A Fuse (for 220 V, used in Military Market only)	1
E64216-002	Caution Tag (with Power Cord, for Military Market only)	1
E64208-001	Envelope for Fuses (for Military Market only)	1
E7958-A	Fuse Label (for Military Market only)	1

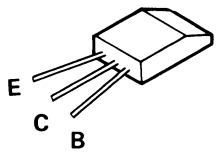
11. JR-S61 Schematic Diagram

Printed Circuit Board Ass'y Locations

P.C. Board Ass'y	Description	Page
TXX-131	Main Amp. and Power Supply P.C. Board Ass'y	15
TPS-123	Lamp P.C. Board Ass'y	18
TXX-126	FM/AM Tuner & Equalizer Amp. P.C. Board Ass'y	19



2SK55



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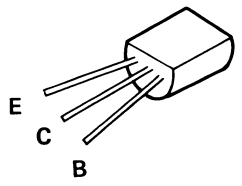
2SA673
2SC1213



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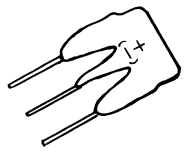
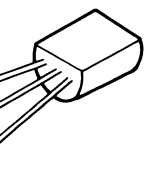


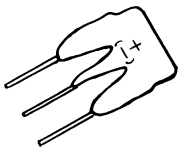
ESAB02-02C
(ESAB02-02N)

Notes:

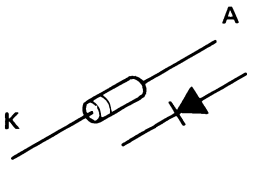
1. Voltage values (measured by VTVM.)
   - (V) DC voltage at non signal input
   - (v) AC voltage at non signal input
   - (V) DC voltage at AM position
2. Voltage values in ( ) are positive.
3. Voltage values in ( ) are negative.
4. —— indicates positive B power supply.
5. —— indicates negative B power supply.
6. —— indicates signal path.
7. When replacing the parts in the darkened area ( ) and those marked with ⚠, be sure to use the designated parts to ensure safety.
8. This is the standard circuit diagram. The design and contents are subject to change without notice.



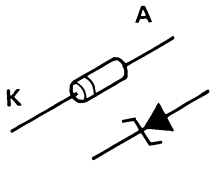
775
72



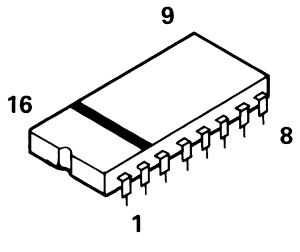
ESAB02-02C
(ESAB02-02N)



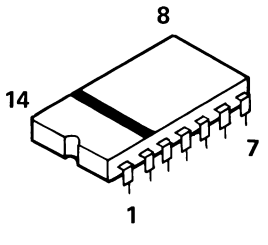
1S2473



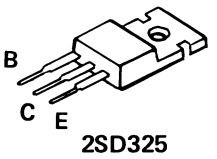
WZ130



HA1196
HA1137W



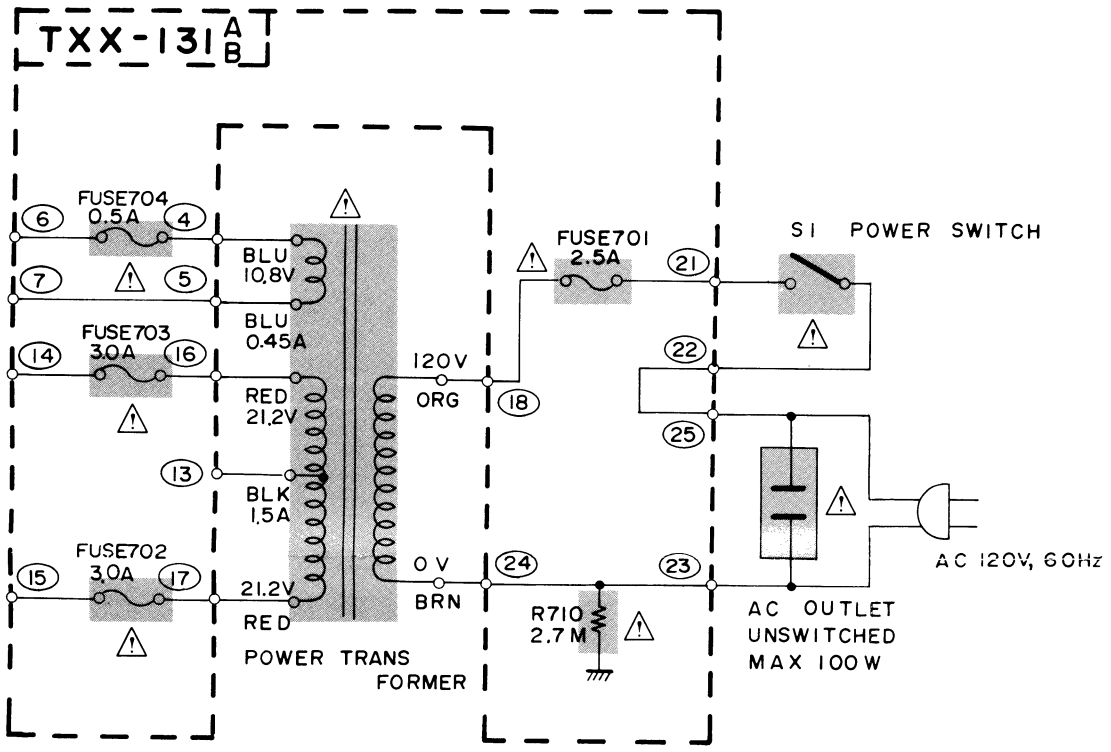
HA1151
HA1452W



2SD325
2SC1061
2SA671

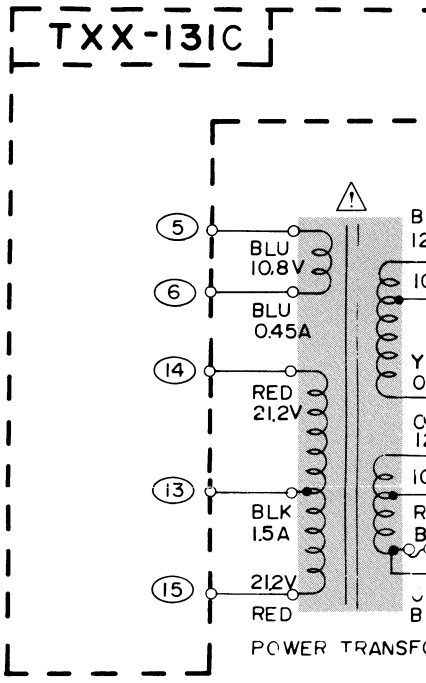
(C) FOR CANADA

PRIMARY AC120V~,60Hz



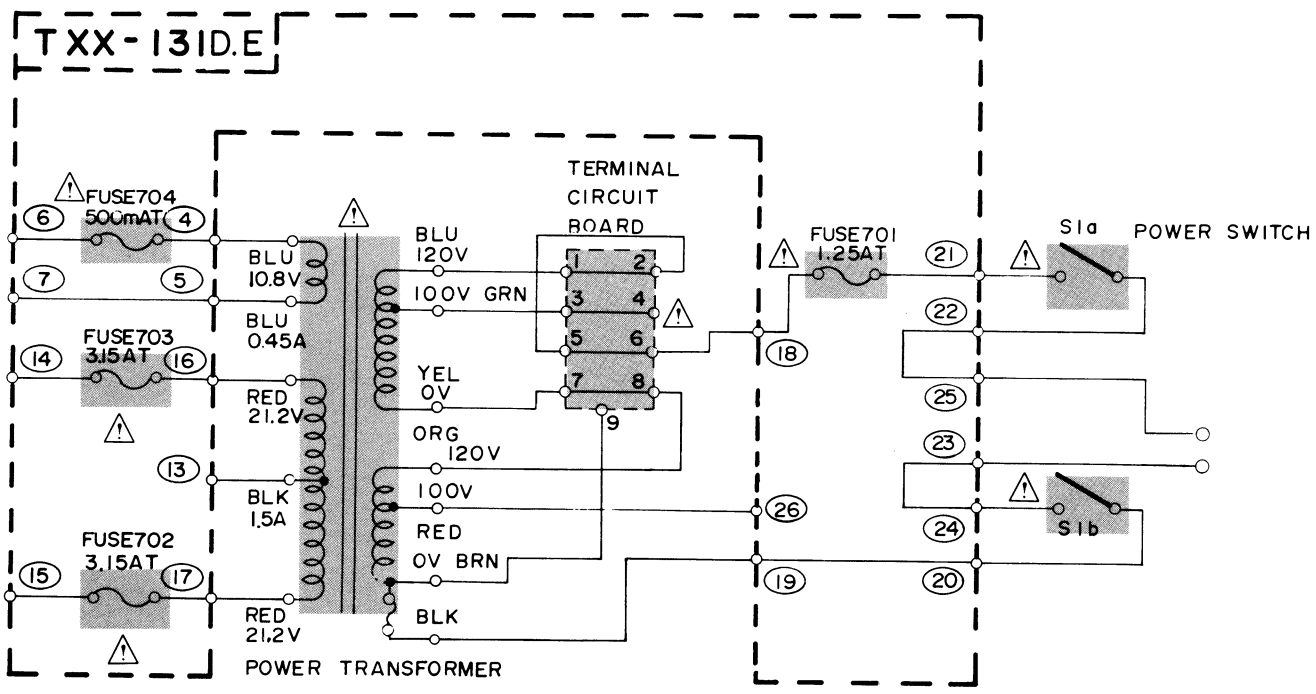
NOTE
(1) THERE ARE NO FUSES (0.5A & 3.0A) FOR AMERICA (J)
(2) THERE IS NO DIN TAPE SOCKET

(P) FOR PACE
(U) FOR OTHER
PRIM

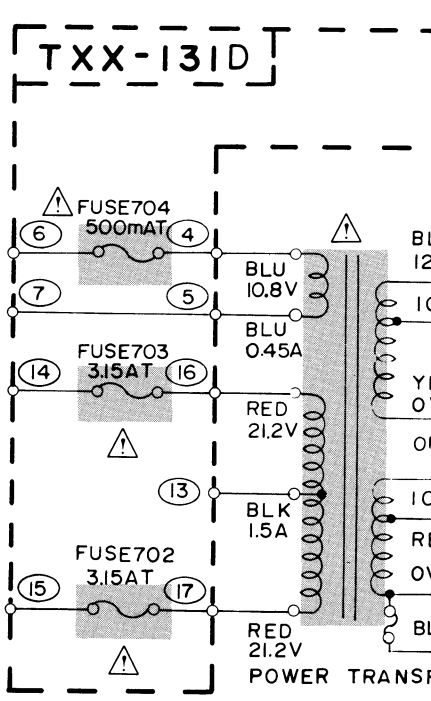


(BS) FOR U.K.
(A) FOR AUSTRALIA

PRIMARY AC240V~,50Hz

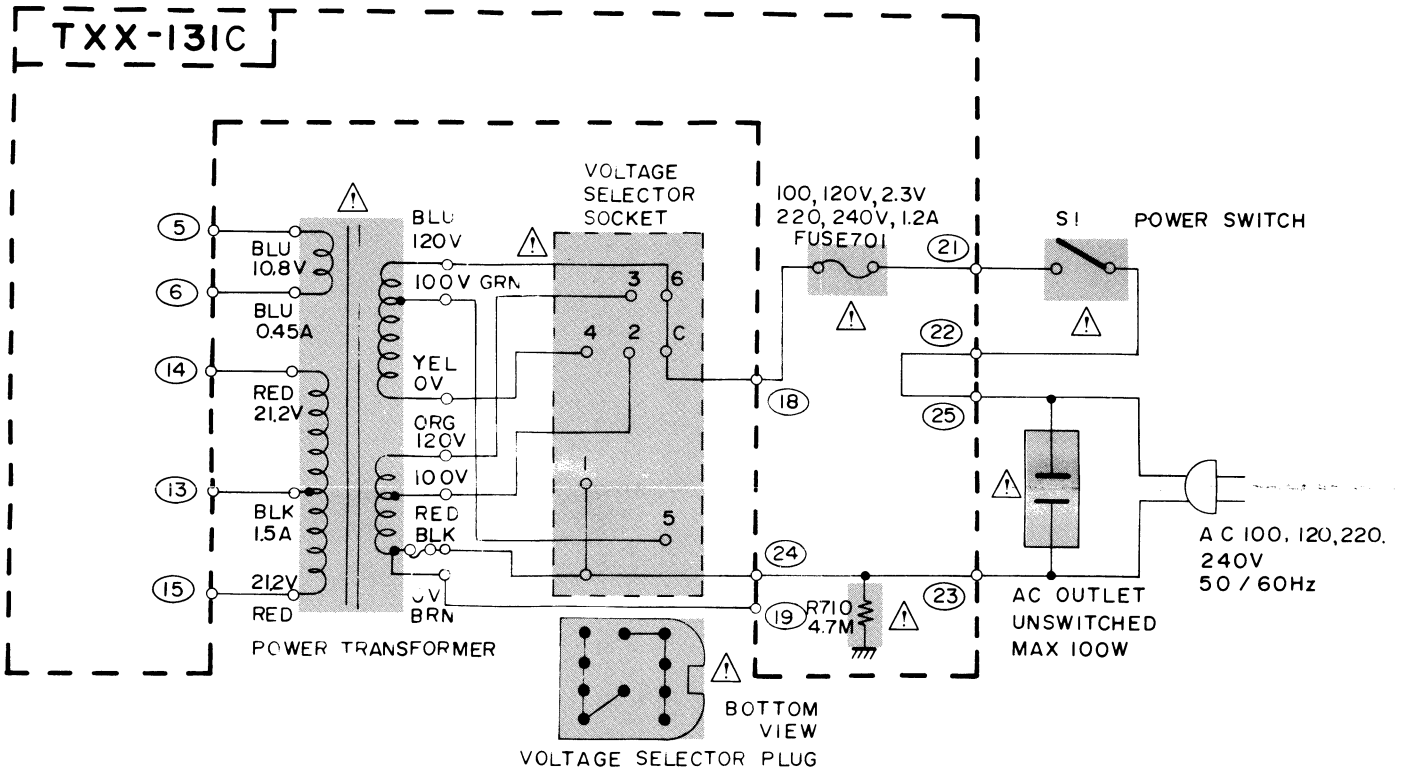


(E) FOR EUROP
PRIM



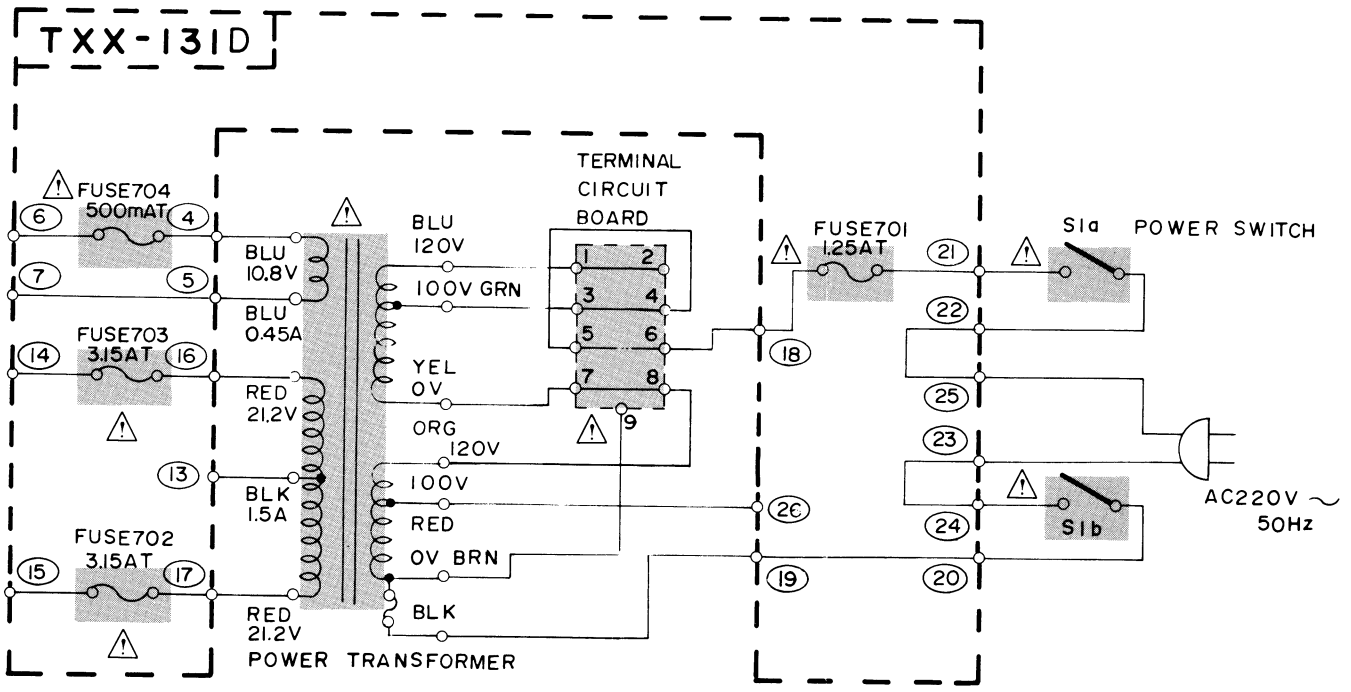
(P) FOR PACEX
(U) FOR OTHER COUNTRIES

PRIMARY AC100V, 120V, 220V, 240V 50/60Hz

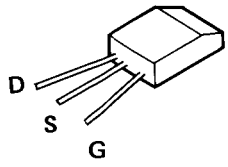


(E) FOR EUROPEAN COUNTRIES

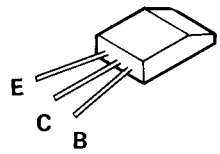
PRIMARY AC220V~, 50Hz



12. Transistor, I.C. and Diode Lead Identification



2SK55



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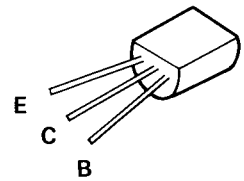
2SA673
2SC1213



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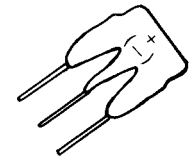
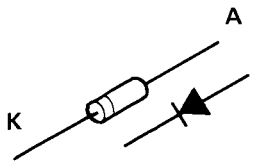


ESAB02-02C
(ESAB02-02N)



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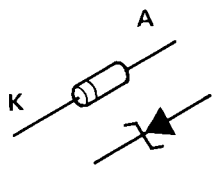
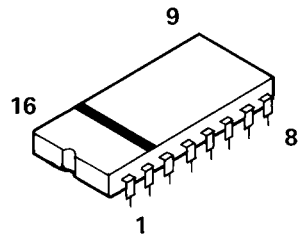


WZ130



HA1196
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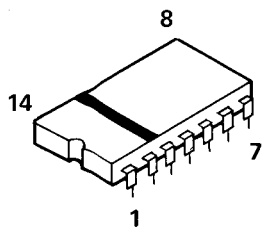
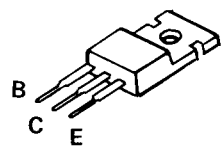


HA1151
HA1452W



2SD325
2SC1061
2SA671

13. Parts List with Specified Numbers for Designated Areas

Page	Item No.	Description	For U.S.A.	For Canada	For Australia	For U.K.	For European Countries	For PACEX and Other Countries
6		Power Transformer⚠	E03077-25	E03077-25	E03077-25B	E03077-25BBS	E03077-25B	E03077-25B
8		Power Switch⚠	QSR0088-001	QSR0088-001	QSR0088-002	QSR0088-002BS	QSR0088-002	QSR0088-002
8		4-Pin Jack Ass'y	E03591-40B	E03591-40B	E03591-001	E03591-001	E03591-001	E03591-001
		Covering Plate	E65415-001	E65415-001	–	–	–	–
8		Power Cord⚠	QMP1200-244	QMP1200-244	QMP2610-200	QMP9017-008BS	QMP3910-244	QMP1200-244
8		P. Cord Stopper⚠	QHS3876-162	QHS3876-162	QHS3876-162	QHS3876-162BS	QHS3876-162	QHS3876-162
8		AC Outlet⚠	QMC0235-002	QMC0235-002	–	–	–	QMC0235-002
		Covering Plate⚠	–	–	E61079-003	E61079-003	E61079-003	–
15	8-(1)	Power Amp. & Power Supply⚠	TXX-131A	TXX-131B	TXX-131D	TXX-131EBS	TXX-131D	TXX-131C
15	8-(1)	Contact Clip⚠	E45525-001	E45524-001	E48965-002	E48965-002BS	E48965-002	E45524-001
		Composition⚠ Resistor	QRC121K-275E (2.7 MΩ/1/2 W)	QRC121K-275E (2.7 MΩ/1/2 W)	–	–	–	QRC121K-475E (4.7 MΩ/1/2 W)
		Instruction Book	E30580-654A	E30580-656A	E30580-656A	E30580-654ABS	E30580-656A	E30580-656A
25		Warranty Card	BT20020C	BT20025	BT20029	BT20013BBS	–	BT20014B (PACEX only)
15	8-(1)	Fuse (Primary)⚠	QMF61U1-2R5 (2.5 A)	QMF61U1-2R5 (2.5 A)	QMF51A2-1R25 (1.25 A)	QMF51A2-1R25BS (1.25 AT)	QMF51A2-1R25 (1.25 AT)	QMF60R1-1R2 (1.2 A) or QMF60R1-2R3 (2.3 A)
		Fuse (Secondary) 3 A or 3.15 A⚠	–	QMF61U1-3R0 (3 A)	QMF51A2-3R15 (3.15 A)	QMF51A2-3R15BS (3.15 AT)	QMF51A2-3R15 (3.15 AT)	-
		0.5 A⚠	–	QMF61U1-R50	QMF51A2-R50	QMF51A2-R50BS	QMF51A2-R50	-
		Fuse (SPK Protect) (2.5 A)	QMF60S1-2R5	QMF60S1-2R5	QMF51A2-2R5	QMF51A2-2R5BS	QMF51A2-2R5	QMF60S1-2R5

NOTE: ⚠ SAFETY PARTS

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VICTOR COMPANY OF JAPAN, LIMITED, TOKYO, JAPAN

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